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ABSTRACT

This instructor's resource manual is designed to assist nurse/instructors in four training programs: Nurse Assistant in Long-Term Care (NALTC), Medication Technician (MT), Level I Medication Aide (MA), or Insulin Administration (IA). A brief report on the project that developed the manual is presented first. Section 1 includes an article on adult instruction which contains a brief characterization of the adult learner and an exploration of the concept of goal-directed teaching of adults. Section 2 covers the following: teaching methods; the lesson plan format; media for teaching; and a common checklist for beginning any of the training programs. Forms for starting a training program are included. The NALTC training programs in section 3 contains the following: a course overview, implementation checklist, open entry/open exit model, teaching guidelines, how to challenge the course, and sample forms. Materials for the MT training program in section 4 consist of a course overview, implementation checklist, sample teaching schedule, and sample forms. The following are provided for section 5, the MA training program: a course overview, checklist for implementing the course and teaching lesson plans session by session, detailed outline of teaching lesson plans, and sample forms. A course overview and implementation checklist comprise the IA training program in section 6. Contents of the final two sections are as follows: (1) Missouri rules and regulations governing the training programs; and (2) resources, including publications, newsletters, and audiovisual materials. (YLB)

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ED356343

Final Report

Nurse Assistant Instructors Manual and Resource Guide
Project No. : 91-133-110-1(B) (161-161)

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Abstract

A publication entitled the "CNA/CMT Instructors Manual and Resource Guide" was developed as part of a Department of Elementary and Secondary Education grant with the intention of providing first time and experienced instructors of CNA or CMT courses with advise, assistance, examples and resources to use in providing courses of instruction. Multiple and varied resources have been provided for the instructor or potential instructor. A key to making this manual a useful document over a long period of imte will be the commitment of the Metropolitan Community Colleges to update the material as needed. The decision to use a three ring loose leaf notebook as the binder further lends the manual to quick, timely and cost effective revisions. Findings from initial use in the field by CNA instructors have resulted in some changes and additions to the original draft. CNA/CMT training regulations have been provided as a section of the manual. Anticipated changes in the Missouri CNA/CMT training regulations have been described and are included separately. When the Division of Aging publishes new regulations, they will be included in a future revision.

Nurse Assistant educators and representatives from the Department of Elementary and Secondary Education, Health Occupations and the Division of Aging have discussed the needs of the new or inexperienced certified nurse assistant, certified medication technician (CNA/CMT)instructors for several years and determined that a manual or resource guide should be developed and made available. In view of the need to provide consistent quality instruction for nurse assistants, Instructor/Examiner workshops have been provided to new and experienced instructors. Over a period of time, CNA and CMT curriculum has been developed through the financial support of the Department of Elementary and Secondary Education. Project number 91-133-110-1(B) (161-161) is an example of the support that has been provided to help promote educational programs that serve the long term patient care industry. The teaching guide that has been developed through this grant consists of a collection of teaching tips, organizational and delivery methods and resources that have been tried and found to be beneficial by experienced Nurse Assistant instructors.

There is a desire to continually update and change this document in order to insure that it becomes a valuable resource within itself. The writers of the CNA/CMT Instructors Manual and Resource Guide recommend that it be used in the Instructor/ Examiner workshops. Every consideration should be given to this idea. Meetings of the advisory committee were held in Jefferson City, St. Louis and a meeting will be held in July, l991 at the Missouri Vocational Association to review the final publication. The writers for the manual completed initial drafts which were reviewed by the committee and then rewritten. Editorial revision was complete to keep redundancy to a minimum and to reduce the volume of material from 400 pages to approximately 300 pages. The final version of this document is being created with a desk top publishing program, therefore creating a type set appearance of the final document.

CE 063 410

Objectives

1. provide an orientation to adult education principles for the CNA/CMT instructor to include methods and strategies of teaching.

2. describe curriculum models like the open entry/exit model in order to provide the instructor with an explanation of alternate methods for course organization and delivery.

3. list several teaching resources that have been tried and tested with positive results by experienced CNA/CMT educators, these resources include audiovisual hardware and software, computer assisted instruction, newsletters, publications, AV library listings and other teaching aids.

4. include regulations for CNA/CMT training and course delivery.

5. field test the CNA/CMT Instructors Manual and Resource Guide.

6. revise the content and organization of the manual as needed.

Conclusion

The objectives that were established to guide this project have been accomplished. A CNA/CMT instructors manual has been written and published as agreed to for the purpose of assisting those instructors to provide optimum delivery of instruction. This publication has been developed with the assistance of the Department of Elementary and Secondary Education, Supervisor of Health Occupations Programs, the Coordinator of Nurse Assistant Training of the Missouri Division of Aging and was developed using a state wide representation of Nurse Assistant educators.The effective use of this publication will be greatly enhanced if it can be adopted as part of the instructor/examiner workshops provided throughout the State.

Instructor's Resource Manual

Resources for Training:

- Nurse Assistant in Long-Term Care
- Medication Technician
- Level I Medication Aide
- Insulin Administration

Prepared and published by
the Metropolitan Community Colleges
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in cooperation with
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and Secondary Education

VERSION 1.0, April, 1992

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✣ Introduction

We're getting older.

People over 75 years of age are now the fastest-growing segment of the population. By the year 2000, we can expect to have 36 million people over 65. It is a trend that will accelerate as research and medical care advance. This aging of the population may create many changes in American institutions and businesses in the coming years. One thing is for sure: there will be a growing number of elderly people that will need long-term and intermediate care.

And that means a greater demand for trained people to care for them.

Training Is Key

The role of the instructor is critical in assuring well-trained care-givers. That's why we've developed this manual. Its purpose is to assist instructors—in this case, nurses—with teaching one of four training programs: **Nurse Assistant in Long-Term Care, Medication Technician, Level I Medication Aide,** or **Insulin Administration.**

There has been a need for this type of manual for some time. Nurses are often more comfortable instructing patients than students. Some have little experience in setting up a class, presenting classroom theory, writing test questions, handling adult student problems or clinical supervision.

Those who are experienced in teaching often need to review guidelines now and then and explore alternate methods of teaching to make their classes better. Both new and experienced instructors need to know where to find materials which can make their class more informative and interesting.

What's Inside

This manual will help the instructor understand the motivations of adult students and provide strategies for teaching them. It also includes comprehensive checklists to help implement each training program. Explanations of the Lesson Plan format, which is the basis of all the programs, and open-entry/open-exit scheduling are provided, as well as examples of forms that can be used.

One of the most important sections of the manual is the Resources section which includes materials that have been tried and tested by experienced educators. These include publications, newsletters, audio-visual materials, and other teaching aides.

This manual also includes copies of the state rules and regulations which govern the requirements for these programs.

With this manual and the information presented in the Missouri Department of Aging Instructor/Examiner/On-The-Job Supervisor Workshops, new or experienced instructors will have all the tools they need to make their class a rewarding experience.

History of the Training Programs

The source for the training programs outlined in this manual is the Omnibus Nursing Home Act which was enacted by Missouri in 1979 to provide regulation of Intermediate, Residential I and Residential II and Skilled Nursing care facilities (see the definitions for these facilities on pages 7.1–7.2).

Following this Act, separate rules and regulations were developed which provided the basis for the training program curriculums.

Nurse Assistant in Long-Term Care. This training program was a cooperative effort of a 15-member advisory committee established by the Division of Aging and the Department of Elementary and Secondary Education. The curriculum was written by E. June Meyer, MA, R.N., of the School District of Kansas City (Mrs. Meyer has also provided extensive help with the development of this manual) and was published in January of 1980.

Subsequent revisions of the regulations and the curriculum occurred in 1988 extending the classroom hours required from 35 to 75 and requiring Nurse Assistants trained prior to January 1, 1989, to attend a four-hour update class by August of that year.

Medication Technician. The original 48-hour course was written by Yolanda Dolecki of the Department of Elementary and Secondary Education and Ann Wormsley of the Division of Aging in 1978. Revisions were made in 1982, 1986, and 1990.

Level I Medication Aide. This curriculum was written in 1985 by Vada Arrowood of the Department of Elementary and Secondary Education in cooperation with the Division of Aging.

Insulin Administration. This program was written in 1982 by Pat Winberg of the Missouri Department of Elementary and Secondary Education. Subsequent revisions were made in 1990 by an advisory committee headed by Tom Whalen, state pharmacist for Missouri.

About this Manual

This publication has been developed by the Metropolitan Community Colleges of Kansas City through the support of a grant provided by the Department of Elementary and Secondary Education.

The manual was made possible through the foresight and leadership of Diane Dunn-Sluyter, RN, PhD, Supervisor of Health Occupations Pro-

grams for the Missouri Department of Elementary and Secondary Education, and Lois Bonet, Director of Education for the Division of Aging, Missouri Department of Social Services.

To create the manual, a planning committee met over a period of one year to develop ideas for it and critique preliminary content. Committee members donated their time and were invaluable in the development of this manual. The members of the planning committee, in addition to June Meyer and Diane Dunn-Sluyter, were Dennis Hronek, Director of Health Care for Metropolitan Community Colleges (MCC) and project coordinator for this manual, Pat Dixon, Yolanda Dolecki, Phyllis Robichaud, Clare Eisenbach, Emily Featherston, and Kathy Yount.

Others contributing to the creation of this manual include Roger Banbury, free-lance writer, who provided editing and writing services; Karla Jones, MCC graphic artist, who developed the cover graphics; Kay Fusselman, MCC word processor, who was desktop publisher; and Deborah Vacek , MCC graphics technician, who created the forms at the back of each section.

It is expected and desirable for this manual to change as new rules and regulations are passed and new materials and teaching strategies are brought to light. With that in mind, it uses a three-ring binder and a pagination format which allows easy updating. As changes occur, updated materials will be provided to you.

This is *your* manual, and your ideas on how to improve it are welcomed. Send comments to:

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✣ Instructing Adults

People who decide to become Nurse Assistants in Long-Term Care, Medication Technicians, or Level I Medication Aides aren't kids. There may be some 18-year-olds who are seeking training, but chances are the average age of your class will be several years higher.

You will be teaching adults, and that may mean you need to employ a different style than if you were instructing high school students.

The following two articles will give you information on adult instruction. The first is a brief characterization of the adult learner. The second is a reprint from an article by Dr. Karen Tarnow that explores the concept of goal-directed teaching of adults in depth.

What's inside:

	Page
• Teaching the adult learner	1.1
• Reprint of article "Working with Adult Learners"	1.5

The Adult Learner

Do you know your students?

If you're teaching a Nurse Assistant, Medication Technician, Level I Medication Aide, or Insulin Administration Training Program, you'll find a wide diversity of students with different backgrounds, education, and experience. But they all have one thing in common: They're adults.

You may have a 35-year-old woman with two children at home sitting in your class. Or an abused, recently divorced 27-year-old who's working nights to make ends meet. Or a 43-year-old housewife who wants to get an outside-the-home job. Or a 20-year-old with limited education who is trying to escape the cycle of poverty.

They're adults with adult problems, adult goals, and adult family, social, religious, and employment commitments.

And that makes a big difference.

The Challenge of Teaching Adults

Teaching adults can be challenging and rewarding. Adults are not a captive audience of passive students who are only killing time. They are people who are there by choice. They're serious about their education.

For that reason, the instructor had better be prepared. "If adults are not satisfied with the learning, they may communicate this to the teacher in words, or leave," says Dr. Karen Tarnow (see page 1.5).

Adult students may not want to assume the subordinate role that is expected of younger students. Instead, they see themselves as peers of the instructor. According to an article in the *Vocational Education Journal* (April 1989) by Joseph S. Karmos and Lillian Greathouse, "They see cooperative responsibility with the teacher for their own growth and learning."

Adults also demand respect. Attempts to "pull rank" or put them down are sure to be met with stiff resistance. Your role should not be one who "knows all." Instead, you are there to help the learner discover.

Adult learners are a diverse group, and bring a wide variety of backgrounds to the classroom. You can take advantage of this wealth of skills and experiences to make your class experience a rewarding one for your students and yourself.

Group interaction may allow individuals to share their knowledge with others in such ways that self-esteem is increased and group learning is enhanced.

Problems to Overcome

Adult learners may need to develop confidence in their ability to learn. Perhaps they have been away from school for some time, or have had a less-than-rewarding experience while they were in school.

What's more, some students enrolled in the courses outlined in this manual may have a limited educational background and are deficient in basic skills such as reading, spelling, and basic math. (In 1985, the United States ranked 49th in literacy of the 158 members of the United Nations, and it hasn't improved since.)

Therefore, your students may have some anxiety about their abilities, which in turn may lead to poorer performance. You must be supportive and offer encouragement. You can create a friendly environment which erases the tension of a formal student-instructor relationship.

You can also set up small goals at frequent intervals to help students experience success often enough to feel stimulated and rewarded.

As your students discover their own capabilities, they will experience a sense of accomplishment which further stimulates learning. When students develop confidence, they are no longer defensive about who they are and become more open and willing to learn.

No Time to Waste

Because there are so many demands on their time, time is more precious to adults than to teenagers. Adults won't put up with someone wasting their time. They come ready to learn and want the information quickly so they can get on with their careers.

For that reason, you should know the education level of the students you are teaching, so you don't waste time teaching them something they already know. Or frustrate them with teaching them something beyond their abilities.

What's more, you should always start sessions on time and keep to the schedule. Your courses and activities should be well organized. And be sure to leave time at the end of a session for questions.

Styles of Learning

Most adults prefer problem-solving learning rather than subject-centered learning. This important concept is explored in depth in the following reprint of an article by Dr. Karen Tarnow.

Adults want participative learning that focuses heavily on immediate application of concepts and involvement in activities. That way, they can see the results of efforts invested in learning and see that it is relevant.

That's one of the reasons the Lesson Plan formats set up for the training

programs in this manual provide for immediate application of lesson content.

Adults also want to be involved in planning. Give your students an opportunity to have a hand in selection of materials.

Variety Is the Spice of Learning

Everyone has a unique learning style. Facts that are important to one person may not be to another. And every student reacts differently to the same stimuli.

Therefore, it is important you come to know each student as an individual. You should also vary the methods of teaching and provide an environment rich in resources.

By using a variety of teaching methods and by providing a choice of activities, you can reach all your students. Students will rely on their preferred learning style to become proficient and develop self-confidence.

What's more, they will learn to adapt to other methods and will benefit from being exposed to the various learning styles.

By the way, you should also be aware of your own bias towards a particular learning and teaching style. If you limit yourself to only one style, you are sure to lose part of your audience. Therefore, you should vary your teaching methods.

Comfortable Learning

Comfort is important to an adult. Dr. Tarnow discusses this in the following reprint, and it is also covered under the "Methods for Teaching" part of the Teaching Strategies section of this manual.

For Adults Only

Teaching adults may require extra effort from an instructor—more preparation, more organization, more sensitivity, more respect for the individual. However, the effort is worthwhile. Use some of the suggestions outlined in this manual, and you may find teaching adults to be a very rewarding experience.

Working With Adult Learners

by Karen Gahan Tarnow, R.N., Ph.D.

Note: This discussion of adult learners is extracted from an article by Dr. Karen Tarnow, Coordinator-Education, St. Mary's Hospital of Blue Springs, Blue Springs, Missouri. The original article appeared in Nurse Educator, *September-October 1979. Although the article was designed to discuss teaching continuing education courses to nurses, its references to working with adult learners applies to students in the training programs covered in this manual. With the author's permission, references to "nurses" have been replaced by "adults" in this excerpt.*

This article discusses characteristics of adult learners and methods that facilitate their learning. It emphasizes that adults are generally goal-directed and see learning experiences as means to reach goals. They learn best when a problem-centered approach that incorporates direct application is used.

Although the individual goals, needs, and objectives of adult learners vary considerably, certain common characteristics influence their interaction with the educational process. This article discusses characteristics of adult learners, elements of teaching-learning systems relevant to adult learning, and methods that facilitate learning among adults.

At its conclusion, the reader will be aware of:

1. The many roles adult learners fill.
2. Basic adult learning concepts.
3. Teaching methods effective with adults.

The Influence of Adult Roles and Self-Concepts Upon Learning

Family, social, religious, and employment commitments demand adults' time and attention. Individual and societal priorities will determine which commitment dominates at a specific time. For example, an adult committed to an educational program may miss class in order to stay home with a sick child.

Adults are a heterogeneous group when one considers their differing backgrounds and examines their variety of roles in the health care system. These variables influence the learner's needs and interests. Instructors who remain aware of learners' characteristics are more likely to prepare and deliver relevant courses.

Motivation

Past educational experiences will influence the way adults approach current learning situations. If past experiences were rewarding, they will be eager to learn and will come to the learning experience expecting to be successful. However, if past experiences were frustrating and led to failure or ridicule, new learning situations will be avoided or approached with caution. If this is the case, they must be helped to feel confident and capable of learning.

How does the instructor facilitate such a change of attitude? Setting attainable goals promotes success and a feeling of confidence. As the learners discover their own capabilities and experience a sense of accomplishment, they often are stimulated to further learning and the rewards inherent in reaching goals. The important thing for educators to remember is to set attainable goals or subgoals at small intervals so success is experienced often enough for learners to feel stimulated and rewarded.

Goal setting is a concept central to adult learning. Basically, adults are goal-directed; learning activities are often ways to achieve goals. Thus an educator can benefit by knowing the goals of the learners. Generally, these goals involve acquiring specific knowledge or skills which will improve their working performance. Learners' goals always influence their responsiveness to teaching/learning situations.

Philosophy for Adult Learning

The role of instructor, the role of learner, instructional methods, and the learning environment all stem from the instructor's philosophy of learning and culminate in the formation of a learning experience which actualizes this philosophy, dictating what will happen within the teaching-learning situation. The instructor's philosophy of learning should be based upon solid educational theory, such as that developed by Malcolm Knowles. In 1968, Knowles introduced the term "andragogy"—the art and science of helping adults learn.[1] Application of the concepts of andragogy since then have shown that they are really concepts of effective education and are not age-specific. To help readers develop or expand their personal philosophies regarding the teaching-learning process, examples of philosophical beliefs about adults and learning are provided in Tables I and II on the following pages.

Educators need to clarify for themselves what learning is and what the roles of the instructor and the learner are within this definition.

Learning can be defined very broadly as a change in behavior which includes thoughts, actions, and/or feelings. According to Cooper, "Learning can be done only by the learner."[2] Thus, the purpose of education is to make experiences available that will promote growth as evidenced by more effective, realistic, successful behavior. If a climate that fosters learning is provided, learning and growth will occur.

Table I. The Learning Process

1. Learning is an active and continuous process which is manifested by growth and changes in behavior.
2. Learning styles and rates vary from one individual to another.
3. Learning is dependent upon the readiness, the emotional state, the abilities, and the potential of the learner.
4. Learning is influenced by the life experiences of the learner.
5. Learning is facilitated when the material to be learned has relevance to the learner.
6. Learning takes place within the individual.
7. Learning is facilitated by proceeding from the simple to the complex and from the known to the unknown.
8. Learning is facilitated when the student has the opportunity to test ideas, analyze mistakes, take risks, and be creative.
9. Learning how to learn enables the student to deal with the expansion of knowledge and changes in nursing and society.
10. Learning takes place through planned educational sequences and other means.
11. Learning is facilitated when the learner has knowledge of his progress toward the goal.
12. Learning takes place more effectively in situations in which satisfaction is derived.
13. Interpersonal relationships are important in determining the kind of social, emotional, and intellectual behavior which emerges from the learning situation.
14. Recognition of similarities and differences between past experiences and present situations facilitates the transfer of learning.
15. Learning is influenced by the learner's perception of himself and the situation in which he finds himself.
16. Learning is more effective when there is immediate application of what is being taught.
17. Learning is more useful when it becomes generalized into principles and concepts.
18. The content to be learned helps determine the kind of learning experiences that will be most effective in terms of time and effort.

University of Nebraska Medical Center, College of Nursing. "Learning principles accepted by the faculty of the College of Nursing in 1972." Reprinted with permission.

"The urge for growth is an especially strong motivation for learning, since education is, by definition, growth—in knowledge, understanding, skills, attitudes, interests, and appreciation. The mere act of learning something new gives one a sense of growth."[3]

How can educators make the most of what adult learners bring to the educational experience and offer them optimum opportunities for learning and growth? The remainder of this article discusses specific methods for teaching adults.

Table II. Adult Learning Principles

1. Adults like to determine their own learning experiences.
2. Adults enjoy small group interactions.
3. Adults learn from others' experiences as well as their own.
4. Adults hate to have their time wasted.
5. Some adults like some lectures, but all lectures won't be liked by all adults.
6. Adults are motivated to learn when they identify they have a need to learn.
7. Adults are motivated to learn when societal or professional pressures require a particular learning need.
8. Adults are motivated to learn when "others" arrange a learning package in such a manner that the attraction to learning overcomes the resistance.
9. Adults draw their knowledge from years of experience and don't change readily.
10. Adults want practical answers for today's problems.
11. Adults like physical comfort.
12. Adults enjoy practical problem solving.
13. Adults like tangible rewards.
14. Refreshments and breaks establish a relaxed atmosphere and convey respect to the learner.

Texas Woman's University, College of Nursing Special Programs in Continuing Education for Nursing. Reprinted with permission.

Methods for Teaching Adults

Some basic methods have been established as effective with adult learners and are presented here for reference when planning educational programs.

Needs assessment is the first step in preparing an effective adult learning experience.

Adults should be actively involved in the learning process. To establish such involvement, the instructor should solicit learners' input through a needs assessment. Needs assessments can be conducted through surveys, questionnaires, interviews, task forces, and many other methods.[4,5] Course offerings planned in response to learner identified needs will appeal to goal-directed adults.

Needs assessments at another level should be used after establishing program topics. Instructors need to assess participants' backgrounds so they can plan learning experiences at the appropriate level. This assessment can be done by asking participants to fill out a simple questionnaire (see Table III). The educator then adapts the content so it is appropriate for those attending.

Table III

Personal Data

Present or last professional position: _____

_____

Career aspiration: _____

_____

_____

I plan to use this course: _____

_____

_____

This semester, I would like to learn: _____

_____

_____

Name: _____

SS #: _____

Telephone: _____

The information must be presented at the right level of complexity. If it is too simple, learners may feel bored and insulted; if it is too complex, they will feel threatened. When backgrounds and knowledge vary considerably within a group, care must be taken in selecting the content and the approach. Such a mixed population is one of the most difficult groups to teach. One way to avoid this problem is to identify a target group clearly when the course is being promoted.

Problem-centered learning has more relevancy to adults than subject-centered learning.

A needs assessment helps to produce programming that is problem-centered. This orientation to learning is more effective than the traditional subject-centered approach.[6] Adults want practical answers for today's problems and this "need to know" stimulates learning.

Overall, the problem-centered approach emphasizes application of the information learned. The educator's goal is for the learner to assimilate the information made available through course offerings and to apply this new learning on return to the work setting, thus resolving the problem that stimulated the need for learning.

Application of learning during or following an educational experience is important to adults.

A problem-centered course offering prepares participants for immediate application of the learning. Educational theory supports this approach as an effective way to teach adult learners. [7,8]

"An adult's time perspective in regard to learning is one of immediate application. The reason an adult enters into education is to be able to better deal with some life problem about which he feels inadequate now. He wants to learn something tonight that will help him better deal with some of his problems tomorrow."[9]

Participants should be able to begin to apply learning in their work situations following their first contact with the instructor. This immediate application provides direct feedback and reinforcement. The learner sees the results of the efforts invested in the learning and views it as useful and relevant.

Adults are rich resources to aid the learning of other adults.

While adults come to learning experiences because of their own needs, they also come with rich resources in terms of their varied skills, knowledge, and life experiences. Group interaction may allow individuals to share these resources with others in such ways that self-esteem is increased and group learning is enhanced. Using adult learners as resources is an important educational strategy.

The educator's role in encouraging or discouraging such sharing is critical. Comments like "What would you do?" or "Has anything like this ever happened to you?" or "Do you have any suggestions?" invites participants to share their experiences and ideas. A small group discussion approach in which group members are asked to share experiences related to a given problem maximizes the input and broadens the learning base. In this way persons are recognized and valued for their contributions. To effectively use this concept the instructor should have skill in facilitating group process. These skills will enable her to prevent domination of the discussion by one member of the group, and to be aware of nonverbal messages that can be used to draw out quiet members of the group when they appear willing to contribute. Summarizing what the group has said may stimulate further discussion and clarification. She should also know how to keep the group focused on the task at hand.

A small-group format may be an effective approach for facilitating the learning process for adults.

The ancient scholars used a small group approach to the teaching-learning process. Currently, this format has been reintroduced and has been widely accepted, although it is sometimes misused. Small groups allow each individual to contribute and thus they enhance opportunities for the sharing of individual resources. Sitting in circles encourages interaction and allows all to feel equal since no one sits behind anyone else. However, the emotional and interactional benefits of circle seating is minimal after the group reaches 15, when the large diameter becomes a barrier. Many seating arrangements are possible, each with its advantages and disadvantages. Using their knowledge of group process, educators need to consider the content being presented and the size of the group in choosing the most efficient and effective arrangement.

Participative learning gets adults actively involved in the teaching-learning process.

Knowles advocates action learning or participative learning as an effective teaching strategy.[10,11] Experiential techniques, simulation exercises, and community action projects are effective in facilitating adult learning. This is particularly important when the learning has to do with such things as biomedical instrumentation, interactional processes, or physical assessment skills, for learning at the application level or in the psychomotor domain mandates participative learning. Adult education is turning more and more to mannikins that allow learners to see and feel and hear body parts and disease processes. Demonstration, practice, and return demonstrations of procedures with people or machines ensures that learning has taken place. This involvement makes the learning "more real" than lectures, charts, films, or reading.

Role playing is one of the best methods for developing therapeutic communication skills. It is an easy thing to say that an adult should provide support, encourage ventilation of feelings, or establish rapport. However, doing and saying what will facilitate these processes needs to be practiced, and role play involves the learner totally in the process.

Thus in participative learning, the learner is responsible for acquiring and actualizing the affective, cognitive, and behavioral changes that learning entails, and the instructor is responsible for providing the means for this process to take place.

However, the lecture should not be discarded as a viable method of transmitting knowledge. Many adults were educated by this process earlier in life and are familiar and comfortable with it. It has the advantage of delivering information to large numbers of people at the same time. The lecture has proven to be a valuable teaching method and should not be abandoned merely because other methods have also been shown to be effective.

Another approach for conveying information *en masse* is through the use of written handouts, but this may be expensive. A compromise solution might be to lecture on the main points and distribute a handout which contains more detail. This method has two advantages: 1) People can pay attention to the lecture and not be distracted by taking notes; and 2) they will have something to refer to later.

Physical comfort is an important consideration when planning an adult learning experience.

Adults like comfort. Classrooms generally are not really made to fit adults and their learning needs. Adults may have some physical problems which will interfere with learning if comfort is not provided. Typical school desks create difficulties for persons who are overweight or have back problems. Some people may have trouble hearing, so attempt to find a room that is away from elevators, the cafeteria, and other extraneous noise. It should have good acoustics or a sound system.

There is also a psychological aspect to consider: depressing locations are bad for morale. In health care facilities, try to schedule programming in the conference rooms with the big, soft, swivel chairs, not the barren little room in the basement with the cement floor and wooden chairs. In colleges, make arrangements for the seminar rooms, not the lecture auditoriums. If financial resources allow for it, a hotel convention center is comfortable for a large group.

Lighting, temperature, and ventilation should be conducive to learning and physical comfort. Feeling too hot or too cold distracts from learning. Coffee and cookies or other refreshments convey respect for the person and lessen the threat of the learning experience. People tend to relax with a cup of coffee in their hands. The educator should schedule regular breaks and should know where the ladies' and men's restrooms are.

Audiovisual media may assist the learner in meeting the objectives.

Adult educators should take advantage of all available resources. Wiman and Meierhenry encourage creative use of audiovisual materials as an integral part of the instructional design.[12] However, they advise care in selecting a medium that is appropriate for the message. Some concepts require movement and/or sound while others may be adequately taught through the use of a simple transparency or slide. Various types of media can be used to assist the learner in reaching goals and objectives efficiently. They must be part of the teaching method, not an ornament for the entertainment of the learner.

Films or videotapes may bring a "guest lecturer" to the group or display patient behavior or demonstrate a nursing procedure. They may be shown to a small group, a large group, or assigned for in-depth viewing. Students in today's schools of nursing perceive assignment of films, videotapes, audiotapes, slidetape shows, or film loops much as the way the book or magazine assignment was viewed years ago. They see each as a resource containing information to supplement or complement other teaching methods. Older learners may not respond as well to assigned audiovisual material because they are less familiar with it. Thus, care must be used in introducing such assignments and explaining available facilities.

A flip chart, blackboard, slide, or transparency may be useful in focusing attention on ideas or concepts. When presenting information this way, it is best to offer one idea at a time. Then, when summarizing, they can all be listed together. (If an entire list of ideas or concepts is presented initially, learners may be reading or copying the list rather than paying attention to what is being discussed.)

Evaluation is an important part of any program.

How does the instructor know if participants are learning what is being taught? How do learners know if their newly learned behavior is correct? Evaluation and feedback are necessary in any teaching-learning situ-

ation, both for the instructor and for the learner. Instructors need to be evaluated in regard to total performance. This feedback allows them to modify their approach as needed to best assist the learner to meet the objectives and criterion statements. Likewise, the learner needs feedback on performance from the instructor, and possibly from peers, so that correct behaviors are reinforced. Verbal compliments or more tangible rewards aid a participant's learning.

Formative evaluation of each participant should occur throughout a course to identify needed revisions in the teaching-learning process and because feedback should be immediate to be effective. It must correct behavior or reinforce it at the time learning occurs. Evaluation and feedback should therefore be considered learning tools to be used by the educator in a positive manner. Summative evaluation conducted at the end of an instructional sequence provides an indication of the learning that may have occurred. In addition, learners should be assisted to develop the skills to analyze their own experiences and evaluate them. As a result, learning may continue beyond the time when an instructor is available.

Learners' evaluations of the educator are also helpful in promoting learning. These evaluations may allow the educator to learn which approaches are effective or ineffective with a given group. They may also reveal which topic areas need more attention, causing the educator to alter the course so that participant learning is enhanced. It is important to evaluate the course for content and methodology, and the educator for approach and knowledge.

Educator's Response to Adult Learning

Working with adult learners in an educational situation can be very challenging and rewarding, for they are not a captive audience. If adults are not satisfied with the learning, they may communicate this to the teacher in words, by not staying, or by not returning. Continued learning is an option. Even with those professions that mandate continuing education, much latitude is offered in meeting the necessary requirements. Thus adults usually undertake learning experiences voluntarily.

Because the participants of continuing education offerings have such varied educational and employment histories, planning programming at the appropriate level is difficult. Providing interesting and meaningful offerings requires a diligent search for alternative approaches to learning. The backgrounds acquired by adult participants through the years of learning and living could be threatening to some continuing education instructors. However, those same backgrounds may mean that the teaching-learning experience becomes more challenging and interesting for the educator. Obviously, the educator's own personality, confidence, and security greatly affects the education experience.

Tough discusses the use of nonteachers as learning resources.[13] Nurses who may not have had formal training as educators are beginning to see

themselves as instructors for other learners. Continuing education and staff development directors and instructors should be alert for such nurses who can teach others formally and informally.

The continuing educator must possess a variety of skills for use in teaching-learning situations. These include lecturing, facilitating discovery, problem solving, stimulating interaction, directing to other resources, being aware of process, and evaluating performance. The role of educator has changed from one who "knows all" to one who can "help the learner discover." This process includes discovering: 1) what the learning needs are; 2) how to achieve them; and 3) the learning itself. Discovery learning, as an instructional approach, is a complex, ambiguous process—one which requires a constellation of different instructional skills. Each is important; the key for the successful educator of adult learners is appropriate selection of the methodological approach for a specific situation coupled with careful timing. The ability to smoothly shift from one approach to another, according to the situation, is essential.

Summary

Adult educators should actualize a philosophy of learning which incorporates many of the concepts identified in this article. Periodically, most adults enter teaching-learning situations as a means to achieve some goal. Adults can identify their learning needs and can help design ways to meet them. Learning that is planned in response to needs is usually problem-centered and allows for direct application of the new learning in the work setting.

The educator should choose the methodological approach which produces the most effective learning. Use of equipment, skills, or procedures are best taught experientially, by methods other than lecture. However, lectures are a good way to communicate information to large numbers of people. Written handouts can also accomplish this feat. Often information can be transmitted via handouts and its application can be discussed in small groups.

A climate of mutual respect and collaboration is conducive to adult learning. Adults are individuals and like to be recognized as such. Each brings a lifetime of experience to the learning process and these skills and knowledge can be shared with others. Educators can convey respect for these learners by arranging for comfortable seating arrangements and refreshments. Feedback through evaluation methods is important to both learner and educator.

The beliefs and methods discussed in this article will help educators plan and implement interesting and relevant learning experiences for adults.

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✣ Teaching Strategies

Sometimes, just a few "tricks of the trade" can make the difference between a successful teaching experience and a poor one.

Inside this section, you'll find a wealth of general teaching information you can use to enhance your instruction. There are also discussions of the unique needs of adult learners to help you better understand your students.

Included is a description of the Lesson Plan format, which is the format the training programs covered in this manual follow.

The final topic of this section is a common checklist for beginning any of the four training programs outlined in this manual. This checklist can then be followed up by the course-specific checklists included in each program's section.

What's inside:

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- Teaching methods 2.1
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Methods for Teaching

Successful completion of the Nurse Assistant, Medication Technician, Level I Medication Aide, or Insulin Administration Training Program is an important stepping stone in a student's health care career.

As such, your instruction means a great deal both to the students and the people they will care for in the future. Instructing students is a great responsibility.

How you teach can make a difference between a student's success or failure. Here are a few methods you may want to use to increase your percentage of successes.

The First Day

Get acquainted with the group. Arrive early so you can greet each class member as they arrive. Extend normal courtesies to each. Be friendly, greet them, and introduce yourself. Show enthusiasm.

After all class members are seated, write your name on the blackboard or a large poster.

As the instructor, you are the leader. It is your responsibility to help students progress. Establish a relaxed, friendly atmosphere by:

- Asking them to print their names on name tags and wear them.
- Asking them to tell a little about themselves.
- Speaking of students as a group so they will feel they belong.
- Never affronting or laughing at anyone.
- Encouraging everyone to participate in activities.
- Making students feel you are for them. You want to know what they think and their opinions.
- Keeping in mind that you and the students are a team.

Don't underestimate the value of these "little" things. They can go a long way towards building a productive student-teacher relationship.

Build Esteem

It is important to instill pride and enthusiam in your students for the career they are choosing. From the first day, let them know how valuable they are and how crucial their care is to the welfare of the resident.

You may also want to talk about the kinds of traits that a care-giver should have:

- Sensitivity to the needs of the resident. This requires an attitude of caring and an ability to empathize with others.
- Maturity. The care-giver should be able to control emotions including anger.
- Courtesy and respect for the resident.
- The ability to accept constructive evaluation and criticism.
- Dependability.
- Accuracy in assignments.
- The ability to communicate effectively.

Identify the Needs of Each Member

Take the time to learn about all members of your class. Find out their interests and goals. Be sure to discover their working and educational backgrounds. Adults learn faster when they can integrate new ideas into what they already know; slower if the information conflicts with what they believe.

A good way to do this is to open discussion on the lessons that will be taught. Then write the title of the course on the board, ask each class member what they want to learn, and write their answers on the board. Suggest additional answers.

Make yourself available before and after class to talk with individual members.

Ways to Enhance Learning

Some ways to help you "get through" to your students include:

- *Provide active participation in the teaching/learning process.* Adults participate more enthusiastically if they have a hand in the selection of materials and presentation.
- *Proceed from the simple to the complex, known to unknown.* Start simple and build. Learning is facilitated if it flows from what is known. Fast-paced or unusual tasks interfere with learning.
- *Set attainable goals and sub-goals so success can be measured frequently.* This promotes a feeling of success and confidence. The student feels stimulated and rewarded. Adults are generally goal-directed.
- *Provide immediate application of theory.* This provides opportunity to test ideas, analyze mistakes, take risks, and be creative. Immediate application provides direct feedback and reinforcement. The students can see the results of their efforts to learn.

- *Provide immediate and frequent feedback / evaluation.* It is important for the learner to know immediately how he or she is doing in regard to what is expected. This increases self-esteem and corrects problems before they are ingrained. You must keep accurate records of procedures which students have mastered.
- *Sensitivity training is important.* Provide opportunity for students to role-play—to think, to see and feel as a resident.
- *Provide opportunity for conferencing.* One-on-one conferences provide an opportunity for praise as well as address concerns in some areas. These conferences should be well-documented to show you have attempted to help the student improve.

The Classroom Environment

A comfortable classroom is important for teaching, especially when you are teaching adults. A barren little room in the basement with a cement floor and hard chairs won't do the job. People's spirits tend to match the environment.

You should have comfortable desks and chairs and decent acoustics or some sort of sound system.

Of course, that's just for starters. According to Karen Tarnow, RN, PhD in *Nurse Educator,* September-October 1979, "Lighting, temperature and ventilation should be conducive to learning and physical comfort. Feeling too hot or too cold distracts from learning. Coffee and cookies or other refreshments convey respect for the person and lessen the threat of the learning experience. People tend to relax with a cup of coffee in their hands.

"The educator should schedule regular breaks and should know where the ladies' and men's restrooms are."

Techniques of Instruction

Here are guidelines for teaching the lecture and the demonstration.

The Lecture

This can be the most boring of all instructional methods. The following guidelines and "Tips for Successful Teaching" include several suggestions for bringing in outside materials to add some pizzazz to a class. These materials will not only catch your students' attention but will also help keep *you* from becoming stale. Nothing's worse than a bored, unenthusiastic instructor.

For a discussion of different kinds of teaching media that may be employed and the advantages and disadvantages of each, see "Media for Teaching," page 2.11. For places where you can order materials, see the Resources section of this book.

Techniques for delivering a lecture include:

- Always explain the lesson objectives.
- Make certain you know the material being presented and stress the important points of the lesson. Never give a test question over material that has not been stressed during the lecture.
- Use situations to explain important aspects of the lesson.
- Bring an article from a newspaper or a magazine which applies to the lesson.
- Ask questions if the lecture is an informational lesson. Always ask the question, pause, then call the name of a student. This technique makes the entire class think, not just one individual.
- Involve students in a discussion concerning the lecture.
- Use charts, films, models to clarify subject matter.
- Always stick to the lesson. Remember, these are adult students and they are not there to hear your personal problems or how wonderful your children are.
- Use the blackboard or overhead transparencies to reinforce what you are teaching.

Demonstration Lesson

- Verbally explain the steps of a procedure as they are outlined in the *Instructor's Guide*.
- Do not ask questions or give additional information when teaching steps of a procedure so nothing gets in the way of teaching this crucial information.

  Any additional information needed must be presented in a prior lesson or in the introduction to the lesson. Questions are asked after all steps of a procedure have been presented.
- Demonstrate the procedure. Remember, students love for you to miss a step in a procedure. Prevent this by having a student read each step as you perform it until the demonstration is completed.
- Observe each student on a return demonstration. One hundred percent competency is required before a procedure is checked off competency sheets.
- If a student cannot perform a procedure due to a disability, this must be recorded on the competency and score sheet. Example: Unable to measure blood pressure because of a hearing disorder.
- Procedures mastered in the laboratory should be performed at the very first opportunity on the clinical unit.
- Do not pass a student who has not mastered the competencies of the course.

- If a student fails, you must document why.
- All documentation must state fact and not subjective opinions.
- Practice and repetition are vital to learning.

Testing

No student is without apprehension at testing time. Adults may be very nervous if they've been away from school for a while.

As the instructor, you should adopt an accepting, non-threatening attitude during test time. You can clarify questions; however, you should not assist students. You should monitor the testing period yourself or, if an examiner is conducting the evaluation, be on hand to reduce the stress of a stranger's presence.

A small joke or light comment before starting the test may help ease the tension. Give students ample time to complete their tests.

The testing environment should be quiet and comfortable. And there should be no interruptions or distractions.

Tips for Successful Teaching

1. Talk clearly and slowly. Face the class when speaking.
2. Write or print legibly and large.
3. Use resources including pictures, films, models, posters to add interest.
4. Don't assign busywork.
5. Be organized when giving a presentation. Don't jump from one subject to another.
6. Make students aware of their progress.
7. Recognize that each individual has a different learning style and must progress at his/her own speed.
8. Don't rush students during return demonstrations.
9. Praise good work.
10. Minimize students' faults and mistakes. Be friendly and non-critical.
11. Keep to the subject and avoid technical language which will be over the students' heads.
12. Develop a sensitivity to your students' needs.
13. Bring news from newspapers or magazines which relates to the subject being taught.
14. Clarify ideas by explaining in as many ways as necessary until your group understands.

15. Repeat important information frequently.
16. Encourage member participation.
17. Develop positive values and attitudes in class members.
18. Provide a ten-minute break each hour.
19. Grade quizzes and tests immediately. Go over the entire test with the class.
20. Be neat, clean, and appropriately dressed. You are a role model.
21. Act in a confident manner.
22. Don't use slang, profanity, or sarcasm.
23. Don't correct students in front of others.
24. Be pleasant and good-natured, but firm. You are the leader.
25. Too much familiarity creates problems.
26. Expect the best from your students and they will be the best.
27. Be competent in your subject.
28. Prepare well for each lesson to make the most of students' time. Never try to bluff your way through a lesson.
29. Use personal experiences sparingly and only to make a point or clarify a statement.
30. Be flexible enough to capitalize on special interests or experience of a student.
31. Organize instruction according to learning abilities of students.
32. Be sure equipment is working and you know how to use it.
33. Demonstrate skillfully and correctly the first time.
34. Have proper equipment on hand. Don't expect students to pretend or visualize equipment not there.
35. Use practice periods and tests to promote desirable skills and attitudes.
36. Be enthusiastic.
37. Start class with a brief summary of last class.
38. End class with a brief summary of key points.
39. Be positive about teaching. Don't complain about your job or work. Negative attitudes are catching.
40. Be available to help as needed.
41. Get to class on time, start on time, finish on time.

"A teacher affects eternity; he can never tell where his influence stops."

— Henry Adams

The Lesson Plan Format

All training programs listed in this manual are taught according to the Lesson Plan format, a format developed by Franklin J. King, Ed. D., an emeritus and coordinator of industrial education at the University of Missouri-Colombia.

It is designed to provide a highly organized, simple way to teach these programs and assure all the rules and regulations required by Missouri are met. The format is comprehensive and functional, and it can be reused as needed.

The text in these courses for both the student and the instructor is divided into a series of self-contained lessons that include complete information for that particular topic. It is color coded to quickly identify the type of information.

Instructor's Guide

For the instructor, the Lesson Plan format shows what to teach, how to prepare to teach, how to plan strategies, when to manage learning experiences, when to evaluate student performances, and how to relate lesson objectives to instruction.

The beginning of the *Instructor's Guide* includes a **comprehensive bibliography**, **instructional analysis**, and a **master list** of the Lesson Plans included in the guide.

The pages of the guide are color coded as follows:

White Pages

These provide basic information about the lesson, such as the **Lesson Plan number** (which makes it easy to identify the lesson and keep it in sequential order for filing and retrieving), the **title** of the course, the **unit number**, the **unit title**, and the **number of the particular informational topic or demonstration**.

The white pages begin with the **scope of the unit**, which is a brief statement that describes what the total unit is to accomplish or cover. A review of this statement reminds the instructor what needs to be done.

This is followed by the **lesson title** and the **lesson objectives**. Lesson objectives spell out what is expected of the student as a result of the instructions given. The student will be evaluated on these lesson objectives. In a demonstration lesson, there is only one objective.

Next are **supplementary teaching or learning items**. These are items teachers may want to use to present the lesson. They may include teaching aids and tools, audiovisual items, and handout materials.

Also included are **information assignment materials**, those materials for which the student will be held accountable. In assigning materials, it is important that the title and exact page numbers are given so there is no doubt about the limits of the students' assignments.

References are those materials used in preparing the lesson.

Finally, the **introduction** is a precise statement describing the importance of the lesson. It is a teacher-oriented statement that sets the stage for what is to follow; answers the students' what, why, when, or where questions; and motivates them to listen. Instructors may change or add to the introduction, depending upon their own style of teaching.

Yellow and Green Pages

After the white pages, the next pages are either yellow—in an information lesson, or green—in a demonstration lesson.

The yellow pages provide **information on the lesson** in outline form—they give just enough information to provide cues for teaching. The green pages provide **step-by-step procedures** that are delivered by demonstration. These steps are written in precise, prerequisite order.

Blue Pages

The blue pages include both **interaction items** and **classroom, laboratory shop, or other activities**.

Interaction items ask key questions about the lesson content. In information-type lessons, interaction items should be noted on the course outline—usually as II1, II2, etc. They are asked during the lesson presentation. To save page turning time, you may want to write out the questions.

In demonstration-type lessons, interaction items should only be asked before or after the demonstration so that nothing interrupts the continuity of teaching the steps of procedure.

The list of activities helps make lesson content usable on an immediate basis. An activity may be a discussion of interaction items. In all cases, activities must be tied to the lesson content and achievement of lesson objectives.

Pink Pages

These are used to record **evaluation items.** Evaluation items measure the accomplishment of the lesson objective. With an information-type lesson, evaluation items are questions written to obtain oral or written responses. In the *Instructor's Guide*, these questions are followed by an answer sheet.

With a skill-type lesson, evaluation items test performance according to the steps of procedure. They are usually in the form of a checklist.

Student Guide

For students, the Lesson Plan format spells out exactly what is expected of them. Included are objectives of the lesson, assignments, supplementary learning items, handouts, an outline of the lesson, step-by-step procedures, and evaluation requirements.

The *Student Guide* is virtually the same as the *Instructor's Guide*. The differences are the blue and green pages, which outline how to teach informational and demonstration lessons, and the answers to evaluation items are absent.

For students, the white pages provide an outline of what is taught. If the student purchased the text, he or she may supplement the outline with written notes in the margins.

The pink pages list what will be evaluated and provide a place for the instructor's signature, date, and time allocation. Students must complete all evaluation items before the final written and practicum exam. A student who has not completed the evaluation items will not be allowed to take the final exam. You should spot check to see if all assigned evaluation items have been completed each class day.

The Lesson Plan format is a good guide for teaching the course and assures all information will be covered. It is, however, just a guide, and is not meant to dictate how the course is to be taught.

You may want to write your own Lesson Plans. If you do, you should also follow the above format to assure continuity and clarity.

As you teach your lesson, you should always record suggestions for improvement as you go. The next time you teach, your course will be even better.

Media for Teaching

Nothing's more boring than a bored instructor. Even dynamic teachers can create yawns with a canned lecture.

It is your responsibility to communicate enthusiasm to your students. You can do that by varying your method of instruction to keep yourself fresh, add some pizzazz to your lectures and pique the interest of your audience. You do this with handouts, transparencies, flip charts, the chalkboard or audiovisual media.

Selecting Instructional Media

Properly selected media let you provide an experience not otherwise easily obtained, motivate and arouse interest, increase retention, develop a continuity of thought, provide variety in learning and make better use of instructional time.

According to Ronald J. Baird in *Contemporary Industrial Teaching** the basis for selection of any medium for use in your class is its appropriateness to the learning situation at hand. Your first considerations should be "How will this assist me in getting my point across?" and "How will this help my students learn faster and more comprehensively?"

According to Dr. Karen Tarnow (see reprint on page 1.5), you should choose the medium that is appropriate—"some concepts require movement and/or sound while others may be adequately taught through the use of a simple transparency or slide. (The medium) . . . must be a part of the teaching method, not an ornament for the entertainment of the learner."

The method chosen should be the one that most clearly and simply illustrates the information you wish to teach.

Information Sheets

Handout sheets can readily provide students with the information they need to achieve lesson objectives.

They can present a variety of information. If your training or experience has given you a thorough understanding of your topic, you can create them yourself. You could also create summarizing sheets, pulling information from several sources.

*Ronald J. Baird, *Contemporary Industrial Teaching*, Goodheart-Wilcox Co., 1972. Pages 164-166.

A magazine article can be reproduced to assist instruction (don't forget copyright laws, however). Students can also share information they have by creating information sheets.

Chalkboard and Flip Chart Media

When properly used, the chalkboard and flip chart are effective teaching methods. The key phrase is "properly used." Don't assume it takes no special skill or knowledge to use them effectively. Chalkboard technique needs to be learned and practiced. The same is true for flip charts.

Applications of both mediums are nearly endless. They can be used in nearly any instructional setting, either in combination with other instructional techniques or by themselves. They can be used with the total class or with individuals and by both teachers and students.

Use them to introduce a lesson; present facts, principles or concepts; summarize; list key words, rules, steps, procedures or policies to be followed; illustrate concepts, ideas and processes with diagrams, drawings, charts, graphs, sketches, maps—even cartoons; and emphasize key factors by outlining or underlining important words.

Here are some the advantages and disadvantages of each:

Advantages of the Chalkboard

- It is readily available in nearly every classroom.
- It is relatively easy and convenient to use.
- It is suitable for a wide variety of uses by students and teacher.
- The cost of maintenance and supplies is very low.

Disadvantages of the Chalkboard

- It cannot accommodate a large volume of material (many times handouts are more effective).
- It is difficult and time-consuming to produce intricate and complex drawings.
- It is not adaptable to situations in which a permanent record is needed, and students cannot take a copy with them unless they reproduce it in their own notes.
- The chalk dust is an irritant to some persons.
- You may get a little chalk dust on your clothes, but that is generally accepted as being the mark of a practicing teacher.

Advantages of the Flip Chart

- Because of its lift weight and compact size, it is highly portable and can be taken to almost any location.
- It can be relocated within the classroom or laboratory for use with small groups.
- It can be moved between classroom and laboratory (thus eliminating the need to recopy material) and can be taken on field trips.
- Its nature and design make it relatively easy and convenient to use.

- It is suitable for a wide variety of uses by students and teacher: drawings, charts, and notes.
- Sheets provide a semi-permanent record and can be easily stored for future reference.
- Initial purchase cost is relatively low in comparison to many instructional aids.

Disadvantages of the Flip Chart

- It cannot accommodate a large volume of material (many times handouts are more effective when a sizable volume of information is to be presented).
- It is difficult and time-consuming to produce intricate and complex drawings (once prepared, however, they can be stored for future use).
- Because of its limited size, material may not be visible to large groups.
- The pads and sheets are consumable and new ones must be purchased.
- Material placed on the chart cannot be erased, changed, or easily corrected as with the chalkboard.

Transparencies

Simplicity is the key to a good transparency. Transparencies that are cluttered with too many words can confuse and discourage learners, while a simple one keys in on main points for effective learning. If the transparency is too complex, your students will be busy copying instead of listening. Use a piece of paper to cover material you are not yet discussing and uncover information as you go along. You can simplify transparencies by breaking down a process into subparts and using a series of overlays to present it.

A general rule of thumb is to limit transparency copy to 10 lines or less with no more than six or seven words per line.

The lettering should be large enough to be seen by the last student in the last row, and should not contain masses of black areas, which come off as unevenly colored, blotchy sections.

Involve your students in making or working with transparency information by giving them transparency sheets and pens.

A quick way to write a quiz or short test without producing copies would be to write questions on blank transparency sheets.

Advantages of Transparencies

- Any transparent material can be used.
- Blank transparencies can take the place of a chalkboard. They are

easier for everyone to see than a chalkboard.

- Front-of-the-room projection allows the teacher to maintain eye contact while presenting.
- Materials placed on the projection surface are always visible to the instructor.
- Transparencies can be made of any printed material with a transparency maker. Many copy machines will accept transparency copy sheets in place of paper to produce materials (observe copyright laws).
- Photographs or slides can be converted into an overhead transparency. A special machine must be used to accomplish this. Graphic artists or professional art departments may be able to provide this service for a modest cost.

Disadvantages

- Hassle of converting photographic media into transparencies.
- Limited amount of space to show information.
- No way to show motion.

Operation

An overhead projector is simple to operate. Place the stage (the surface materials are placed on) at a comfortable level for easy placement of transparencies.

Focus by raising or lowering the lens head. To adjust picture size, move the projector forward or backward. To raise and lower the image, adjust the legs at the front of the machine or the tilt of the mirror in the lens head. Test the setup by checking how well you can see when seated in the most distant student seat from the viewing screen. If you are unfamiliar with the projector's operation, consult the manual or make a "dry run" beforehand.

Note: A key to longer bulb life in older overhead or slide projector models without an automatic fan switch is to move the switch to "fan only" for a while when you turn off the machine so it cools the bulb. It's a good idea to keep a spare bulb handy.

Slides

Commercially produced slides are available for many topics relevant to the training programs referred to in this manual.

In addition, slides can be prepared by loading slide film into a 35 millimeter camera. This opens the door to being creative in your teaching methods and gives you the flexibility to personalize your lecture. You can use it to inject some humor into your class too. Keep

a camera with slide film handy to take candid shots of students in training or being silly for later use at a graduation ceremony.

Slide trays come in two sizes for holding 80 or 140 slides at a time.

Advantages of Slides

- Color adds drama and interest.
- Prepared color slides are available on a variety of topics.
- It is not expensive or complex to make your own slides.
- By making your own slides, you can personalize your instruction.

Disadvantages

- Slides are only as good as the photographer — blurred, out-of-focus or poorly composed slides detract rather than help the presentation.
- Action is difficult to present without numerous slides.
- Unless the teacher uses a remote switch, he or she must talk from the back of the room when operating the projector — losing eye contact.
- Limited space for information.

Operation

The operation of the slide projector is similar to the overhead projector. There are usually only a couple of switches to handle. You adjust the image size by moving the projector backward or forward in the room, focus by turning the focus knob, center the image by using the height adjustment screws.

Again, you should make a trial run to make sure you know proper operation and to check out how the image looks from a back seat. Read the operator's manual beforehand (if it is missing, write the manufacturer and request a manual for the slide projector model you have).

Slides are placed into a film tray **upside down and backwards.** Problems, such as slides jamming, or not dropping from the tray are easily fixed.

See the hint on the preceding page for extending bulb life. Kodak projectors also have two positions on the light switch: dim or full brightness. Full brightness wears out the bulb faster.

Films and Videos

Audiovisual media can play a huge role in helping the learner to meet objectives. The combination of sight and sound involves the student much deeper than sound alone.

Films and videos are excellent ways to display patient behavior or

nursing procedures. According to Tarnow, using them is like bringing in a "guest lecturer."

There is a tremendous library of subjects on both mediums, so take advantage of them. Practically every procedure you'd ever want your students to perform is on tape. Tape players are so common in homes these days, that it is usually no problem if you assign a tape for home study.

The equipment to run video — a TV and tape player — is expensive, but there are many companies that sell or rent audiovisual equipment, so shop around.

Advantages of Film and Video

- The use of movement, color and sound together is the next best thing to being there.
- Students are visually oriented and pay attention to this form of instruction.
- Procedures that would be very difficult to explain and difficult to set up can be shown easily.
- Video tapes can be easily stopped or rewound to emphasize a point. Some will provide a clear picture of a single frame and slow motion.
- The purchase of a videocamera allows effective use by both students and instructors for classroom instruction — especially for demonstration and return demonstrations of clinical skills.

Disadvantages

- Equipment is expensive.
- Film projectors can be difficult to operate.

Operation

There are a wide variety of film projectors available, each with its own operating method. Consult the owner's manual for instruction on how to use, and make sure you know how to handle the all-too-frequent problems associated with them. Or find someone who knows how to use the projector and have them on hand when you run it.

Videotape players are very simple to operate (as long as you're not trying to set the clock!) — just follow the buttons for play, rewind, stop, fast forward, etc.

Using a Videocamera for Training

The videocamera is becoming a powerful new instructional tool for the classroom. Most cameras on the market today have been perfected for easy use and many of them have automatic features such as focusing.

The camera can be used two ways: recording the instructor's demonstrations in order to give the student another study aid; recording the student's return demonstrations for later review.

The instructor's demonstrations on tape can be made available to the students to use as often as needed. They can also be used in class for necessary reinforcement after a live demonstration. Tapes should not take the place of a live demonstration, however, because student-teacher interaction is absent.

A tape of the student's return demonstration allows a point-by-point critique of it — often students can easily pick out their own errors. Seeing themselves on video lets them see immediately what the instructor is talking about and virtually guarantees rapid progress.

Although videocameras are expensive, the many advantages of video-recording far outweigh the cost of the camera.

Choosing a Videocamera

In buying a camera, you must first choose between a VHS and an 8 mm format.

VHS cameras are compatible with most home playback/recorders but VHS cameras are heavier —which can make a big difference after several minutes of use.

The 8 mm camera is much lighter and about half the size of a VHS camera and may be less expensive. The smaller tapes cost about the same as VHS tapes and provide longer recording times and image quality as good or better.

Of course, the 8 mm tapes will not play in a VHS VCR. It's easy enough to get around this, however, by buying a cable that plugs into the camera and into the video/audio inputs at the back of most VCRs. Then the camera's own playback capability takes the place of the VCR's (press the "video input" button on the VCR to select the camera's video). Most cameras also include cables for connecting directly to a television set.

There are also some 8 mm playback units available. You can make a VHS tape using the same set up outlined above; however, there will be some drop-off in quality.

Some features you should be familiar with when shopping for a camera:

- LUX—the lower the camera's LUX value, the less light will be needed to obtain a good image. For use in the average classroom or a simulated patient room or lab, purchase a camera that will function at two LUX or one LUX.
- Zoom lens— allows you to zero in on and magnify a particular area of view. An 8X zoom is usually enough for classroom work. Higher magnification usually results in poor picture quality.
- Linear time counter—this shows tape position in hours, minutes and seconds for precise tape position during recording (chances

are, the counter on your tape player won't match the counter on the camera, however). This lets you keep track of points on the tape and make notes for later reference.

- Price—a wide range of prices on videocameras can be found. VHS cameras cost about a thousand dollars, 8 mm cameras about seven hundred dollars. It's a good idea to buy an extra battery pack or two while you're at it, so you won't run out of power in the middle of a recording session.

As with any major purchase, you should shop around, try out how the unit feels, ask questions and study the sales literature. You'll also find consumer guides very helpful in selecting your videocamera.

Other Instructional Aids

There are many companies, and several are listed in the Resources section of this manual, who market anatomical products: manikins, torsos, and models as well as descriptive charts that can be of immense value in a classroom situation.

By simulating procedures on anatomical models, the student overcomes much of the fear that accompanies trying out a procedure on a person for the first time.

Where to Find Media Material

The first place to look for relevant media material is the list of suggested resources found in the references/bibliography section of each lesson in the Nurse Assistant, Medication Technician, Level I Medication Aide, or Insulin Administration manuals.

If you are an instructor in a nursing home, you can get information on instructional material vendors by contacting the Health Occupations Department at the nearest voc-tech school or community college.

Make sure you select materials your students can understand. If they're too complex, they'll get lost; too simple, they'll get bored.

The Resource section in the back of this manual lists sources for a wide variety of prepared materials that may be used to add some excitement to your class. Or, you can make your own.

Materials prepared by you tend to be more closely related to the students' own method of communication, and therefore may be more easily understood. Just make sure they are accurate so as not to cause misunderstanding. They should be as self-explanatory as possible.

The act of preparing materials can contribute to teacher and student understanding and can tap unused wells of creativity.

Checklist for Starting a Training Program

The following gives a general guideline for setting up a Nurse Assistant, Medication Technician, Level I Medication Aide, or Insulin Administration Training Program.

Once the program is set up, see the individual checklists provided in each training program's section for specific details.

Establishing a Need

Facility or School Responsibilities

- ☐ Before starting any course, the facility or school should determine if there is really a need for the class.
- ☐ If there is, recruit students.
  - The school can publish the availability of the class and list entrance requirements in its class schedule.
  - Applications and enrollment information can be sent to known groups of possible students.
  - The class may be advertised or promoted in newsletters, bulletin boards, local newspapers, radio, etc. If you advertise, weigh the cost carefully and have a clear idea of your market area and time frame.
- ☐ Some of the things a facility must consider before implementing a course are:
  - Do applicants meet pre-entrance requirements?
  - What are the qualifications necessary to teach the course and who will teach it? Specific qualifications are discussed in the Overview part of each training program section in this manual.
  - What is the cost of the course to the facility?
  - How will the cost will be covered? Will you charge a fee to the students?
  - Who covers the cost of the textbooks?
  - Is the location of the classroom conducive to teaching and learning? (For more information on this topic, see "The Classroom Environment," page 2.3.

Setting Up the Class

Facility or School Responsibilities

- ☐ Determine where the course will be taught and reserve space for the entire class schedule.

- ☐ Check instructor qualifications to teach the course. Do they meet all state requirements?
- ☐ Send out or hand out applications.
- ☐ Determine if applicants are eligible to take the course.
- ☐ Select the class by interviewing applicants. Class size should be limited to 15 students. A one-to-ten teacher-student ratio is ideal.
- ☐ Collect tuition, if any.
- ☐ Order textbooks.
  - Order textbooks **four weeks** prior to the starting date of your class in order to get them on time.

    To order textbooks, see the order form in the Resource section of this manual or contact:

    Instructional Materials Laboratory
    2316 Industrial Dr.
    Columbia, MO 64202
    1-800-669-2465 (Toll Free)
  - The Instructional Materials Laboratory has both the *Instructor's Guide* and the *Student Guide* for each course.

    If you do not have a copy of the *Instructor's Guide* for the course, it should be ordered several weeks **prior** to the four- week period so the reference materials and equipment it suggests may be ordered in time for the class. These are listed under Supplementary Teaching/Learning Items with each Lesson Plan.
  - Order additional suggested reference materials for instructor or student use, including films or videos from listed companies in the *Instructor's Guide* or companies listed in the Resources section of this manual. These materials can be made available in the classroom.
  - Usually the facility or school offering the course orders the textbooks. It either loans the *Student Guides* to the students for the duration of the course, gives the *Student Guides* to the students and the price is covered in the fee charged for the course, or requires direct payment for the textbook before giving it to the student. This could be a payroll deduction if the course is taught in a long-term care facility.
  - The state-approved curriculum must be taught by the instructor. However, instructors may use their initiative and creativity to add supplementary teaching material and guest speakers.
- ☐ The facility or school sends notification to students regarding the starting date of the class (see example in the back of this section) and necessary information to bring to class on enrollment day.

At that time, the students should turn over to the instructor:

- Student birth date.
- Social Security number. (It is best to obtain a copy of the Social Security card, because often the individual will write the wrong number.)
- Student's picture. The face must be no larger than 1" x 1". This must be in an envelope with the student's name printed on the envelope (the student should not print on the back or front of the photo).
- For the Medication Technician course, a copy of the student's high school transcript or GED scores and BEST test scores are also necessary (see the Medication Technician section for details about scheduling BEST examinations).

Instructor Responsibilities

☐ You (the instructor) should prepare a teaching schedule. This is extremely important in order to cover all the material in the text. Develop a schedule for each day of the class, listing the lessons to be taught. A blank calendar used to set up a schedule is included in the back of this section. Note: The hours listed for a course are minimum. You may extend the course as you feel is necessary.

☐ A copy of the teaching schedule listing lessons, assignments, and text should be made for each student.

☐ Review the textbook. Read all course materials before you assign them to the students. The instructor must set aside time to learn the instructional material thoroughly and individualize the Lesson Plan to suit his or her situation. You do not always know how you are going to teach a course until you are in front of the students.

☐ Write a minimum of two quizzes and one final exam (the final exam for the Level I Medication Training Program is obtained from the Missouri Residential Care Association).

- All questions must be from the pink activity sheets in the textbook. Several activity sheets are combined to make up a test. How you combine the activity sheet questions will depend upon your teaching schedule.
- The questions may be rearranged by putting all multiple choice questions together and all true-and-false questions together. Steps of procedure can easily be turned into true-and-false questions.
- Each test should have written test instructions for each type of test question. For example:

  True or False. *The following questions are either true or false. After you have determined if a statement is true or false, place T*

for true or F for false in the space provided on your test sheet.

Multiple Choice. *Each of the questions or incomplete statements listed below is followed by several options or choices, words, phrases, or series of numbers. From these you are to select the one which best answers the question or completes the statement correctly. Place the correct letter of your choice in the space provided on your test sheet.*

- If students fail an exam, they may retest on that material after the instructor has worked with them.
- Remember, test-taking may cause anxiety in the adult learner. It helps to reassure the student that all questions are taken from the activity pages in their text and that there will be no surprises.
- To figure test scores, divide the number of questions answered correctly by the number of questions in the test (for example, in a 50 question test with 48 correct answers, divide 48 by 50 to get 96%.)

☐ Set up grade and attendance book. See attendance form at the back of this section, grade sheets (or score sheets) with the respective courses. The information needed will probably cover three pages:

Cover Sheet

- Complete legal name.
- Address.
- Phone number.
- Date of birth and Social Security number.
- Class beginning and ending date.
- Instructor's name.

Grade Sheet

- Class beginning (month, day, **year**).
- Class completion date (month, day, **year**).
- Name of course.
- Student's complete name.
- Test grade (raise or lower tenths to nearest whole number).
- Name of test or quiz number and chapters covered in the quiz. The name is important—five years from now, you will not remember what quiz #1 covered.
- Date quiz given.
- Grade average for course. Average quizzes and final grades to get a course grade (take all quiz grades, add them together and divide by the number of quizzes to get a total average).

- Clinical performance grade.

Attendance sheet

- Mark dates of class (including year) for attendance. Place a checkmark for dates when present, an "A" for absence, "T" for tardy (list number of minutes). Prepare a sign-in sheet for the students so you won't have to call roll every time.

Remember, a grade book is a permanent record and should never be destroyed.

☐ Develop in writing the rules and regulations for successful completion of the course. This is often referred to as a student handbook. The handbook should include information on grading, attendance, appearance, and behavior. The Nurse Assistant and Medication Technician sections of this manual include sample student handbooks.

☐ Arrange for necessary demonstration equipment and supplies.

☐ Have enrollment forms ready for the first day of class.

☐ Prepare overhead transparencies, if used.

Implementing and Evaluating the Class

☐ See the respective training program sections of this manual for this information.

Six Weeks Following the Class

School Responsibility

☐ Six weeks after the completion of the course, the school should send out an employee evaluation form to the facility to determine how well the student is doing. This provides the basis for later modifications in the course to rectify problems. See example of an evaluation form in the back of this section.

AUTHORIZATION FOR RELEASE OF RECORDS

(For use by eligible student over 18 years of age)

Date: _____

Pupil Name: _____

Pupil No.: _____ Birth Date: _____

Present Address: _____

_____

Telephone No.: _____

I, _____, do hereby authorize

_____

_____

Address City State Zip

to release the following records:

_____

_____

_____

Release is to be made to:

_____

_____

Address City State Zip

I request that the release be accomplished by:

( ) Allowing the above party to inspect the records at their present location; or

( ) Mailing an accurate copy of the records to the above party at the address indicated.

_____

Signature

WEEKLY LESSON PLAN

Week	Month	Year	Location
Instructor(s)			

Day 1	A.M. and P.M.
Day 2	A.M. and P.M.
Day 3	A.M. and P.M.
Day 4	A.M. and P.M.
Day 5	A.M. and P.M.

CLASS SCHEDULE

Starting Date:_____ Ending Date_____ Instructor_____ Location_____

Day Mo/Yr	Day:	Day	Day	Day
AM	AM	AM	AM	AM
PM	PM	PM	PM	PM

Day:	Day:
AM	AM
PM	PM

List time of lecture and name of lecture or demonstration to be sent prior to starting date to:

_____
School

ATTENDANCE SHEET

SUBJECT _____ TIME or PERIOD _____ ROOM _____ SEMESTER _____

WEEK OF PERIOD		1st WEEK					2nd WEEK					3rd WEEK					4th WEEK					5th WEEK				
MONTH and DAY																										
CYCLE																										
DAY OF WEEK		M	T	W	T	F	M	T	W	T	F	M	T	W	T	F	M	T	W	T	F	M	T	W	T	F
Mark Based on Assignment Indicated In Right Hand Column STUDENT'S NAME	Text Book No.																									
1																										
2																										
3																										
4																										
5																										
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INSTRUCTOR AND COURSE EVALUATION

Instructor:

Course:

1. ORGANIZATION OF COURSE

- ☐ Well-organized
- ☐ Adequate, could be better
- ☐ Inadequate organization - detracts from course
- ☐ Confused and unsystematic

COMMENTS: _____

_____

_____

2. INSTRUCTOR'S KNOWLEDGE OF SUBJECT

- ☐ Well informed
- ☐ Adequately informed
- ☐ Not well informed
- ☐ Very inadequately informed

COMMENTS _____

_____

_____

3. INSTRUCTOR'S ATTITUDE TOWARD SUBJECT

- ☐ Enthusiastic, enjoys teaching
- ☐ Rather interested
- ☐ Rather bored - routine interest
- ☐ Not interested

COMMENTS _____

_____

_____

4. INSTRUCTOR'S ABILITY TO EXPLAIN

- ☐ Explanations clear and to the point
- ☐ Explanations usually adequate
- ☐ Explanations often inadequate
- ☐ Explanations seldom given

COMMENTS: _____

_____

_____

5. INSTRUCTOR'S SPEAKING ABILITY

- ☐ Skilled in presenting material - voice and presence excellent
- ☐ Adequate - does not detract from course
- ☐ Poor speaker - detracts from course
- ☐ Poor speaking teachniques - serious handicap in course

COMMENTS _____

_____

_____

6. INSTRUCTOR'S ATTITUDE TOWARD STUDENTS

- ☐ Sympathetic, helpful, actively concerned
- ☐ Moderately sympathetic
- ☐ Routine in attitude - avoids individual contact
- ☐ Distant, aloof, doesn't seem to care

COMMENTS _____

_____

_____

INSTRUCTOR AND COURSE EVALUATION
Page 2

7. INSTRUCTOR'S TOLERANCE TO DISAGREEMENT

- ☐ Encourages and values reasonable disagreement
- ☐ Accepts disagreement fairly well
- ☐ Discourages disagreement
- ☐ Intolerant of disagreement

COMMENTS: _____

_____

_____

8. INSTRUCTOR'S APPROACHABILITY

- ☐ Very easy to talk to - makes me feel comfortable
- ☐ Fairly easy to talk to, but sometimes I do not feel accepted
- ☐ Not easy to talk to - makes me feel inferior
- ☐ Difficult to talk to - makes me feel rejected

COMMENTS _____

_____

_____

9. INSTRUCTOR'S SELF-CONFIDENCE

- ☐ Always confident and sure of herself/himself
- ☐ Usually confident and sure of herself/himself
- ☐ Sometimes hesitant and unsure of herself/himself
- ☐ Uncomfortable and unsure of herself/himself

COMMENTS _____

_____

_____

10. INSTRUCTOR'S PERSONAL PECULIARITIES

- ☐ Free from mannerisms
- ☐ Has some mannerisms, but are not annoying
- ☐ Constantly exhibits irritating mannerisms

Explain any annoying habits: _____

_____

_____

11. HOW WOULD YOU RATE THIS INSTRUCTOR

- ☐ Superior
- ☐ Outstanding
- ☐ Average
- ☐ Poor

12. THE LENGTH OF THIS COURSE SHOULD BE

- ☐ Longer
- ☐ Shorter
- ☐ Remain the same

13. PLEASE ADD COMMENTS. This section is the MOST IMPORTANT part of the questionnaire.

A. Good points of the course:

B. Weak points of the course which should be improved:

C. What do you feel should have been covered, but was not?

D. What part of the course helped you the most?

E. Was the time of day and hours that the course was offered convenient for you?

INSTRUCTOR AND COURSE EVALUATION
Page 4

F. What other times might be considered?

G. Should this course be offered again?

H. Additional comments concerning the course:

Employee Evaluation

Employee Name _____ 3 months ____

Employer Name _____ 6 months ____

KEY: 4 = Excellent 3 = Satisfactory 2 = Average 1 = Poor 0 = Unsatisfactory

	Grade	Comments
1. Knowledge of job.	_____	_____
2. Quality of work.	_____	_____
3. Organizing ability.	_____	_____
4. Team work	_____	_____
5. Ability and interest to develop in job.	_____	_____
6. Dependable.	_____	_____

GENERAL COMMENTS ON OVERALL PERFORMANCE OF EMPLOYEE:

_____

_____

_____
Supervisor

✣ Nurse Assistant in Long-Term Care Training Program

The Nurse Assistant in Long-Term Care is a vital member of the nursing team. Although Nurse Assistants work under the supervision of licensed nurses, they provide the majority of care to residents. *It is estimated that 90% of the care in a long-term care facility is provided by the Nurse Assistant.*

The Nurse Assistant role is so vital, it is no wonder the government has developed comprehensive regulations concerning it.

The purpose of the Nurse Assistant in Long-Term Care Training Program is to meet those regulations and prepare individuals for employment in a long-term care facility. The program is designed to teach skills in resident care which will qualify students to perform uncomplicated nursing procedures and to assist licensed practical nurses or registered professional nurses in direct residential care.

What's inside:

Page

- An overview of the course including necessary student and instructor qualifications 3.1
- A checklist for implementing the course 3.9
- The open entry/open exit model 3.17
- Guidelines for teaching the course 3.25
- How to challenge the course 3.29
- Sample forms often used with this course ..... Back of this section

In addition, you will find state regulations pertaining to the Nurse Assistant in Long-Term Care in Section 7 of this manual.

An Overview of the Nurse Assistant in Long-Term Care Training Program

The Nurse Assistant in Long-Term Care Training Program consists of 75 hours of classroom training and 100 hours of employment as a Nurse Assistant under the supervision of a licensed nurse.

The Course

The course provides instruction in numerous competencies required to provide care to residents of a long-term care facility and develop professional personal work habits.

Competencies taught include administering first aid to a choking victim; feeding the helpless; assisting with personal care; obtaining specimens; charting; moving, turning and transferring residents; assisting residents in walking; taking vital signs; and more.

Some of the personal competencies taught include organizing, personal appearance, behavior, respect for residents' rights, and using appropriate body mechanics.

The course is based on the *Nurse Assistant in a Long-Term Care Facility* textbook which uses the Lesson Plan format (see the Lesson Plan discussion in this manual, page 2.7, for information on this concept). There are both student and instructor versions of this text, as well as supplements to help students deficient in reading and writing skills. See the Resources section of this manual for ordering materials or contact:

Instructional Materials Laboratory
2316 Industrial Dr.
Columbia, MO 64202
1-800-669-2465 (Toll Free)

The course can be taught in the traditional manner or according to a continuous Open Entry/Open Exit model (see page 3.17).

Student Qualifications

To qualify for this course, the student must be at least 17 years old and employable by a skilled nursing or intermediate care facility involved in direct resident care. A 16-year-old may qualify if the student is 1) currently enrolled in a secondary school health services occupation program or a cooperative work education program of an area vocational-technical school or comprehensive high school; 2) placed for work experience in an intermediate or skilled nursing facility by the program; and 3) under the direct supervision of the instructor and/or licensed nursing staff of the facility while completing the clinical portion of the course.

There are no prerequisite educational requirements. That means students are not required to have reading and writing skills. The instructor is required to read to any student who cannot read.

Time Requirements

Students must be enrolled and studying the approved training program within 90 days of employment at a skilled or intermediate care facility. Exceptions are those people permitted to "challenge" the examination (bypass the course and take the examination for certification). See page 3.29 for information on challenging.

The course must be completed (including passing the final examination) within one year of employment. However a person employed under Title XVIII or Title XIX must complete the course and be certified within four months.

If a student drops the course due to illness or incapacity, he or she may re-enroll in a course within six months and make up the material missed after presenting proof of attendance and materials covered in the original class.

Specific Cases

Those who were employed as a Nurse Assistant after January 1, 1989, and who have not completed at least the classroom portion of the course, must complete the 12 hours of supervised practical orientation before providing direct resident care.

Nurse Assistants who are employed by a nursing service or are working on a private duty basis providing direct resident care, must complete the course, have a current certificate from an approved agency and be on the Division of Aging Nurse Assistant register before giving care in an intermediate care or skilled nursing facility.

Instructor, Supervisor, Examiner Qualifications

General qualifications. Instructors, supervisors, and examiners involved in the Nurse Assistant Training Program must be approved by the Division of Aging.

All must be Missouri-licensed RNs (or LPN for clinical supervisor) or have a temporary permit from the State Board of Nursing. They must not currently be involved in disciplinary action, such as censure, probation, suspension, or revocation.

To be approved, the instructor, supervisor, or examiner must not be found to have knowingly acted or omitted any duty in a manner which would materially or adversely affect the health, safety, welfare, or property of a resident.

If a person is approved, and later found to be negligent in these areas, the

Division will notify the individual he or she is no longer eligible to be an instructor, examiner, or supervisor. Other causes for this action include defrauding a training agency or student by taking payment and not completing a course, not administering the final examination as required, or not being on-site when students are being trained.

In these cases, the individual can ask for a hearing by written request within 30 days of notification. If there is no request, or if the hearing upholds the Division's determination, the Division will notify all approved training and certifying agencies that the individual is no longer considered approved to be an instructor, examiner, or clinical supervisor and that his or her name has been removed from the approved list.

Instructors, examiners, and clinical supervisors must attend a seminar approved by the Division of Aging. A letter of approval and a certificate is issued upon successful completion, and the person's name is added to the list.

Instructors or examiners approved before January 1, 1990, must attend a refresher Nurse Assistant Training Program seminar given by a long-term-care association by July 1, 1993. After that date, all credentials issued prior to January 1, 1990, will be void. Nurses who attend the refresher seminar will be given new certificates and be kept on the Division's list of approved instructors.

Other qualifications include:

Instructor qualifications. The instructor must have at least two years of nursing experience and at least one year of experience in providing long-term care facility services in the last five years, or be employed at such a facility for at least six months, or be an instructor in an approved health occupations education program. Other personnel from the health professions may supplement the instructor; however, they must have at least one year of experience in their field.

Any applicant, other than one teaching in a public school, must submit credentials (resume) and a copy of his or her current license renewal card or temporary permit to the Division of Aging. A letter will then be sent to the applicant indicating the status of his or her qualifications and, if not qualified, what additional requirements are needed. Instructors with letters of approval issued by the Missouri Department of Elementary and Secondary Education are not required to resubmit their credentials to the Division of Aging.

In a facility-based course, the director of nursing service is prohibited from performing the actual training; however, he or she may be the coordinator of the course.

Clinical supervisor qualifications. The clinical supervisor must be on the facility premises when students are performing the on-the-job component of their training. In addition to the general qualifications mentioned above, the clinical supervisor must be currently employed by the facility or by the agency conducting the course.

If not currently employed by a facility, the clinical supervisor must have at least one year of experience in long-term care.

Examiner qualifications. The competency evaluation of the course is conducted by a registered nurse examiner assisted by the instructor. The examiner must not be the instructor nor an employee of the same facility as the instructor.

In addition to the general qualifications mentioned above, the examiner must be:

- Experienced in teaching a similar course or having qualifications to teach a similar course.
- Registered as an examiner with the Missouri Department of Elementary and Secondary Education or with the Division of Aging.
- The examiner must be employed by or under contract with the Division of Aging or an area vocational school or comprehensive high school.

Training Facility

Any facility providing training to Nurse Assistants must be approved by the Division of Aging in order for the students to be eligible for testing and entry of their names on the Missouri Nursing Assistant register.

The facility for the Nurse Assistant in Long-Term Care Training Program can be:

- A vocational-technical school or comprehensive high school offering health service occupation programs. Schools must have a practice classroom with equipment used in delivering health care and a written agreement of cooperation with at least one skilled nursing or intermediate care facility or an extended care unit of a hospital for the on-the-job training part of the course.
- A community college or private agency approved by the Department of Elementary and Secondary Education and/or accredited by a nationally recognized accrediting agency or association on the Department of Education list. Schools must have a practice laboratory with at least one bed unit and equipment used in health care or have a written agreement as above.
- A licensed hospital, skilled nursing facility or intermediate care facility with space sufficient to accommodate the classroom portion of the course. If on-the-job training is not provided on-site, a written agreement as above is required.

Criteria for approval include:

- A designated classroom area with sufficient space for at least 15 students to be seated and take notes (see general classroom suggestions on page 2.3 of this manual).

- Appropriate equipment as needed for teaching the course (see below).
- Approved instructors and clinical supervisors.
- Assurance that the instructor and each student will have a manual for the state-approved course.
- At least two years' compliance with administration and resident care requirements of the Division of Aging prior to application. After approval, if Notice of Noncompliance is issued, approval will be withdrawn within 30 days and certifying agencies notified (however, if class has begun, students already enrolled may complete the course).

To be approved, the training agency must file an application with the Division of Aging, giving the name of the instructor and clinical supervisor, a list of equipment and classroom space to be used, and, if on-the-job training is not provided, a copy of the written agreement with the facility which will provide it. The Division will give approval or disapproval with reasons why in writing within 90 days.

The Division will make an on-site inspection of each approved training agency at any time within two years of approval to check for space, equipment, supplies, and written agreements.

Training agencies are approved for two years. A new application for approval must be submitted 30 days prior to expiration.

This program requires a lot of equipment, from nail clippers to a bed with rails. See white pages of the *Instructor's Guide* for equipment for each lesson. Some of the suggested equipment includes:

Laboratory with one or more beds.
Teaching stethoscope.
Blood pressure equipment.
Audiovisual materials and equipment (overhead or slide projector and screen, or television and video tape player). This is optional.
Graduated measuring devices.
Nasal cannula.
Oxygen tank.
Plastic mask.
Skeletorso.
Bed with side rails.
Safety vest or jacket.
Posey/safety belt.
Wrist/ankle restraint.
Transfer belt.
Hydraulic lift.
Sliding board (optional).
Arm sling (optional).
Fire extinguisher.
Handwashing items.

Isolation gown, mask, gloves.
Adaptive equipment.
Food service items.
Overbed table.
Chair.
40-50 cc bulb or plunger-type syringe.
Personal care items.
Bedmaking items.
Catheters.
Urinal and bedpans.
Enema equipment.
IV pole.
Syringe.
Antiseptic solution.
Air or water mattress.
Tape measure.
Gait belt.
Walker.
Cane.
Brace.
Prosthesis.
Thermometers (oral, rectal, electronic).
Chase doll.
Scale.
Heat lamp.
Heating pad.
Bath thermometer.
Hot water bottle.
Ice bag.

See Section 8, Resources, for companies that can supply some of this equipment.

Maintaining Certification

The certificate of any Nurse Assistant who has not performed nursing services for monetary compensation for at least one day in 24 months becomes invalid and the person's name is removed from the Missouri Nursing Assistant Register.

Such an individual may, however, submit his or her credentials to the Division of Aging at any time and, if unemployed for less than five years, may be authorized to challenge the final examination. If passed, the examiner shall submit the individual's records to a certifying agency so he or she can be issued a new certificate and his or her name can be placed on the Nurse Assistant Register again. If unemployed longer than five years, the individual must successfully complete the entire course to be recertified and is not eligible to challenge the final examination.

All Nurse Assistants trained prior to January 1, 1989, who were not trained using the current course curriculum with at least 75 hours of classroom instruction, must have attended a four-hour retraining program using the *Long-Term Care Nurse Assistant Update* manual in order to continue to be a Nurse Assistant and maintain credentials.

Checklist for Nurse Assistant in Long-Term Care Training Program

Use this checklist **after** the course has been set up, the students have been recruited, facility and equipment acquired, students notified of where and when the course will be held, textbooks ordered, and grade and attendance books set up. See page 2.19 of this manual for instructions for setting up a course.

- ☐ Check all pre-entrance requirements—enrollment forms are completed, 1" x 1" picture provided, etc. See pages 2.20–2.21 for details. Set up a file for each student.
- ☐ Set class rules. Go over written rules verbally. Have students sign a form stating that you have explained the rules and they have understood them.

  Example: I have had the rules and regulations for being a student in the course, Nurse Assistant in Long-Term Care, explained to me and I understand what is expected of me to successfully complete the course.

  Student Signature: _____

  Date: _____

  Instructor Signature: _____

  It's a good idea to develop a student handbook which outlines the rules and conduct that are expected of the students. See the back of this section for an example of a student manual.
- ☐ Pass out textbook, *Nurse Assistant in a Long-Term Care Facility.*
- ☐ Explain how to use the textbook. The text is in a Lesson Plan format. See the Lesson Plan discussion in this manual (page 2.7) for more information on this concept.
- ☐ Pass out class schedule.
- ☐ Explain the testing requirements of the course.
  - A minimum of three written tests (or oral tests if the student cannot read). The third test must have a minimum of 50 questions. A grade of 70% or above is required to pass the tests and be eligible for the final exam.
  - All evaluation items must be completed.
  - All competency sheets must be completed and signed. One-hundred percent competency is required.

- The final examination will be conducted by a state-approved RN examiner who may be assisted by the RN instructor.
- Students must successfully answer 40 out of 50 oral or written questions selected from a test pool of questions safeguarded by the Division of Aging.
- A final competency evaluation which includes eight procedures: vital signs, giving a bath, bedmaking, feeding, transfer, range of motion (unless medically contraindicated), handwashing, and gloving will be given. Students are expected to score 100% on this evaluation, but can pass without taking blood pressure if they have a hearing problem. This must be documented on the final score sheet.

☐ Discuss the length of the course—175 hours. A minimum of 75 hours theory and 100 hours of clinical practice is required before the student is eligible to take the competency evaluation and oral exam. Any missed time must be made up.

☐ Explain that if a student drops the course due to illness or incapacity, the student may re-enroll in the course within six months and make up course material missed without retaking the entire course. He or she must present proof of attendance and material covered in the original class.

Teaching the Course

☐ Prepare a teaching schedule.

☐ Teach the orientation module first (unless the entire course is taught before students have resident contact). Students must be taught this by a qualified instructor before giving care to the resident.

The time to teach the course can vary according to students' abilities; however, it must be taught in no less than 16 hours.

At a minimum, the orientation module includes:

- Handwashing, gloving, and infection control.
- Emergency procedures and the Heimlich maneuver.
- Residents' rights.
- Abuse and neglect reporting.
- Safety (fire and accident).
- Lifting.
- Moving and ambulation.
- Answering signal lights.
- Toileting (use of bed pan, urinal, commode, and toilet).
- Feeding the helpless.
- Preparing residents for meals and serving them.
- Bathing.

- Dressing and grooming.
- Skin care.
- Mouth care.
- Bed making (occupied and unoccupied).
- Promoting residents' independence.
- Communication and interpersonal skills.
- Vital signs.
- Measuring, recording height and weight.
- Recognizing and reporting abnormal body functions to a supervisor.

☐ Teach the course, covering the Lesson Plans in the textbook. See Lesson Plan discussion in this manual and "Nurse Assistant Teaching Methods" of this section for more information.

☐ When a student has obtained 100% competency on a procedure, immediately check, sign, and date the evaluation item (pink sheet of Lesson Plan).

☐ Check off the completion of the competency on a competency sheet (see form at the end of this section) and fill in the date of instruction and hours that may be counted as on-the-job training hours. Laboratory hours may be counted as on-the-job hours since it may not be possible to return all procedures on a resident.

☐ If the student was not competent, document why.

Preparations for Testing

☐ Contact Division of Aging for written test schedule.

☐ Contact the Division of Aging for the name of an examiner to conduct competency evaluation.

☐ Schedule competency evaluation by coordinating examiner and facility availability. When setting a time, allow one hour prior to the test for preparation and briefing and one hour after the exam for conference and completion of records.

☐ Advise examiner of the number of students to be tested.

☐ Establish a method of payment for examiner time, mileage and other expenses and establish an agreement between examiner and facility. Your facility may wish to set up an agreement with another facility to trade examiners or with a school to provide them.

☐ Arrange lunch for the examiner, if the work extends into lunch time.

☐ To prepare for the competency evaluation, the instructor consults with the supervisor to choose participating residents and the long-term care unit. Choose residents in close proximity for convenient testing. A resident's approval to participate should be obtained prior to the day of examination.

☐ Instructor briefs trainees as to time of performance, time of oral or written examination, and resident assigned. A memo reminder of this is helpful. See memo at the back of this section.

☐ An instructor-examiner planning conference is held one hour prior to the exam.

☐ During that time, student eligibility is verified by examiner.

In order to be eligible for testing, a student must have successfully completed the course or have a letter from the Division of Aging granting approval to challenge the exam. Student pink evaluation sheets are checked to see if they are completed and signed. The competency sheet is checked for the following information:

- Name of student.
- Address.
- Social Security number.
- Birth date (examinees must be 17 years old, except in some cases—see qualifications on page 3.1).
- Training site (school or long-term facility).
- Date theory started.
- Date theory completed. Student must complete the course within either one year or four months, depending on circumstances (see page 3.2).
- Verify that 75 hours of theory were completed and three exams were given with at least 70% average.
- Course instructor's signature.
- On-the-job supervisor's signature.
- All competencies checked off with date achieved in the classroom, on-the-job training hours (must total 100 hours), and signature of on-the-job training supervisor.
- Additional comments.

☐ Instructor introduces examiner to administration, students, and personnel.

☐ Examiner and instructor select a minimum of eight procedures from resident care plan. These shall include:

- Taking vital signs (temperature—rectal and oral, pulse, respiration, and blood pressure).
- Giving a bath.
- Bedmaking.
- Feeding.
- Transfer technique.
- Range of motion exercise.
- Gloving.
- Handwashing.

Other procedures included depend on the time of day and residents'

needs. Consider oral hygiene, dressing, documentation, etc.

- ☐ Students are briefed by examiner who puts students at ease and explains expectations. The examinees are informed of assignments, schedule (assign off-duty examinees first), restroom facilities, breaks, and lunch.

Competency Evaluation

- ☐ Give examinees their score sheets. The score sheet is placed in the assigned room and instructor and examiner make notes on it during the examination.
- ☐ Begin procedure performance. Two, but no more than four students, may perform concurrently (number depends on the logistics of working with assigned residents).
- ☐ Performance is evaluated according to:
  - Appearance.
  - Organization (planned sequence of procedures and organization of equipment).
  - Explanations and interaction with resident.
  - Work habits.
  - Procedure (knowledge, safety, student-patient interaction, encouraging patient self-help).
  - End result of procedure.
  - Resident satisfaction.
  - Cleaning and storage of equipment.
- ☐ Competency evaluation of class and individuals challenging may be conducted at the same time.

After Testing

- ☐ A final conference is held following competency evaluation. Only proficient examinees are approved and reasons for non-approval are recorded.
- ☐ Any person who fails the competency evaluation, except those who have been permitted to challenge the competency evaluation, can retake the competency evaluation within 90 days.
- ☐ If the competency evaluation is failed again, the entire course or selected sections, as determined by the examiner, must be retaken before another competency evaluation can be given.
- ☐ Any person who challenges the competency evaluation and fails must immediately enroll in the course and complete it within four months of employment.
- ☐ Disagreement between instructor and examiner may be appealed to the Educational Department of the Division of Aging or the Health

Occupation Supervisor of the Department of Elementary and Secondary Education.

- ☐ Student's final record is prepared. All information is completed, and examiner and instructor sign it. The third person signing the score sheet may be either the administrator or director of nursing. If a student has a handicap and is competent in all other areas, it should be noted on the score sheet. Competencies are checked for complete information.
- ☐ Records are to be kept on file for inspection and transcript purposes.
- ☐ A copy of the student's final record is given to the student.
- ☐ For state records and to enter the student's name on the Nurse Assistant Register, copies of the completed and signed competency record sheet and the final competency evaluation which includes scores and comments are sent to one of the three nursing home associations listed below.
- ☐ Certification is sought from a nursing home association or a public education agency in the health occupations system, or both.

  The Division of Aging maintains a list of associations or agencies approved to issue certificates. The association or agency must review all documents, assure program requirements have been met, issue certificates to individuals who have successfully completed the course, provide names and other identifying data to the Division on a monthly basis, and maintain records for at least two years.
- ☐ Each agency has its own form. Prepare each form according to its instructions. All agencies require the following information:
  - Typed, completed information.
  - Signatures of examiner and instructor.
  - A photo of student in an envelope with the student's name on it. (Face must be no larger than 1" x 1", and there should not be writing on either the front or back of the photo.)
  - Fees (checks are accepted from schools and nursing facilities; money orders from students).
  - Copies of competencies and score sheet.

Nursing home associations include:

Missouri Health Care Association
236 Metro Drive
Jefferson City, MO 65109
Phone: (314) 893-2060

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Executive Director
Missouri League of Nursing Home Administrators, Inc.
1411 Southwest Boulevard
Jefferson City, MO 65109
Phone: (314) 634-5345

Missouri Association of Nursing Homes for the Aging
6925 Hampton Avenue
St. Louis, MO 63109
Phone: (314) 353-9050

Open Entry/Open Exit Model for Nurse Assistant Training Program

The Nurse Assistant in Long-Term Care Training Program can be taught in an open entry/open exit manner. This model allows the facility to maintain on-going training and allows students to enter and exit training shortly after employment.

Benefits to the Facility

Open entry/open exit provides several benefits to a long-term care facility:

- Initiates training promptly so it will be completed within 120 days of employment as required.
- Trains new employees as they are hired.
- Justifies the cost of a full-time in-service/orientation position.
- Allows current employees to sit in on designated sessions to fulfill annual in-service needs or to review and follow-up as needed.
- Provides a built-in quality assurance plan for employees injured because of improper body mechanics. Employees could attend the body mechanics class and be reviewed before returning to work.
- Increases employee satisfaction—with training beginning immediately, there is less frustration working in a health system with no health base.

For more advantages of open entry/open exit, here is a reprint of an article by Kathy Yount, RN, which appeared in the *EX.C.I.T.I.N.G Newsletter*, February, 1991.

Advantages of Open Entry/Open Exit CNA Training

Open entry/open exit classes:

- Can be easily scheduled year-round.
- Are each self-contained units of instruction.
- Can be entered by new students at any point.
- Have graduates in smaller number more often instead of an entire class at once.
- Prevent bad care practices from forming since students no longer wait a month or two for another class to start.
- Uses instructor's time better by keeping classes as full as possible.
- Are one of the easiest scheduling solutions for meeting the OBRA regulation requiring Nurse Assistant certification within four months of hire.

Schedule Ease

Because demands on the day's time are usually longer than the day for a director of nursing, assistant director of nursing, or inservice nurse, plans for starting a new non-OE/OE class get postponed again and again just like those Christmas letters we mean to write. When classes appear on the staffing schedule every week, two or three nurses can get certified to teach, divide up the classes, and keep class moving. Class then becomes a rock in mid-stream that staff scheduling flows around.

Self-Contained Classes

We are teaching adults who work full-time. Many didn't enjoy high school and dropped out. They don't like homework, and some will call in sick instead of come to class for a test covering three or four weeks' material. With students entering OE/OE classes almost every week, homework assignments and studying for tests create too many subclass areas for the teacher to track anyway. Besides, this is not a class these employees have **chosen** to be in—it is required for their job. Homework and studying for tests isn't where it's at for these folks at this level, especially considering what they're paid.

Eliminate **required** homework and offer suggested reading or vocabulary flashcards covering the whole course for memorizing with friends while driving to work.

With OE/OE, you can give a test over the day's material at the end of each day's class. This helps prevent test-anxiety absenteeism and, by the end of each student's own class cycle, will have allowed the student to take enough tests to ease test fear. Give mid-term and final take-home tests, made from copies of the weekly tests.

Don't worry about tests circulating around the nursing home. It's good if they do. Staff talks with each other about what's on the test, which provides peer reinforcement for good care practices. Also, when nurse assistants discuss questions with the floor nurses, the tests become a diplomatic reminder to the nurses to expect and require Nurse Assistants to do their work using care practices learned correctly in class.

Let go of the idea that tests have to be some big secret. They were meant to be one tool for measuring subject mastery. They have become a weapon which destroys both self-esteem and the joy of learning.

Enter Anytime

With OE/OE, a new Nurse Assistant can be in class the first or second week on the job, depending on the length of orientation. Basic hand-skills needed for class can be covered briefly in orientation. Keep the pre-teaching in orientation very simple—just the actual hand-skill—the HOW. Class is where there's time for students to learn the WHY. In Missouri, if new NAs learn the how of tasks required in the orientation module and TPR and BP, they've got a good foundation for entering class at any point in the cycle.

How It Works

A continuous series of lessons is set up in day-by-day modules that stand on their own. Because each module is independent, students can enter the training program at the next class date **once they have completed the orientation module.** Classes will then review, reinforce, and introduce theory, while providing time to work on skill levels.

The orientation module is the key to making open entry/open exit work. It may take three or four days, and must be kept separate from regular class time. It should include:

- Handwashing and gloving.
- Infection control.
- Residents' rights.
- Abuse and neglect reporting.
- Safety—fire and accident.
- Lifting, moving, and ambulation.
- Answering signal lights.
- Bedpan, urinal, commode, and toilet.
- Preparing residents for meals and serving them.
- Feeding the helpless.
- Skin care.
- Bathing, dressing, and grooming.
- Mouth care.
- Bedmaking—occupied and unoccupied.
- Emergency procedures—Heimlich Maneuver
- Promoting resident independence.
- Communication and interpersonal skills.
- Vital signs.
- Measuring and recording height and weight.
- Recognizing and reporting abnormal body functions.
- Death and dying.

Problems with Open Entry/Open Exit

Seeing that students are taught all the components in the orientation is somewhat difficult. You can make this easier by:

- Including Nurse Assistant modules in the general orientation scheduled for all new employees.
- Assigning Nurse Assistants to read all the material in the text that corresponds to the orientation module.
- Requiring students to complete an initial two days of orientation before going into the Nurse Assistant class.
- Setting aside a portion of each Nurse Assistant class period for information, demonstration, and practice of skills learned in the orientation module.
- Providing a videotape that includes orientation, policies, and pro-

cedures to ensure students get the same material whenever they need it.

With an on-going class, where the curriculum is repeated, the instructor must find ways to keep motivated. Good ways to do this include using audiovisual material, using other professionals as guest speakers (e.g., a social worker to discuss death and dying, a dietitian to review nutrition, a physical therapist to demonstrate transfer skills). Team teaching with another instructor can also be helpful.

To give new students adequate time to practice, vital signs should be introduced every third week. In this session, additional clinical practice could be offered and, if necessary, tutoring in problem areas as time permits. This session might also address the needs of students who have completed the curriculum, providing review for final testing and preparation for exit.

The nursing home staff must be willing to support new untrained aides on the floor.

Accurate Record-Keeping

With students entering and exiting at various times, accurate record-keeping is essential. Keep a list of each module and the date each student attends as in the example below. Have students sign in and keep an attendance sheet.

Name of Student	Module and Date Completed				
	I	II	III	IV	V
Smith, L.	9/18	9/27	10/4	10/11	10/18
Johns, H.		9/27	10/4	10/11	10/18
Roberts, S.				10/11	10/18
Franklin, K.					10/18

When students complete the Nurse Assistant training, they are then scheduled for the final written test and the final demonstration check-off on the next available date(s).

An Open Entry/Open Exit Schedule

The following schedule for teaching Lesson Plan modules in an open entry/open exit manner creates a course of nine sessions with the third session repeated every third week. Each class session would be 7.5 hours in length.

This is just a guide, however, and can be adapted and adjusted to meet your needs. The open entry/open exit concept is flexible, just as long regulation requirements are met. The hours of the class can vary from two hours to the seven and one-half shown here, and the class can be held weekly, daily, or any combination of days and times.

	Lesson Plan Description
DAY 1	Becoming a Nurse Assistant Long-Term Care Health Team Ethical and Legal Responsibilities Communication Skills Orientation to Long-Term Care Environment Safety Measures for the Resident and Environment Fire, Natural Disaster, and Other Emergencies
DAY 2	Infection Control Handwashing Return Demonstration Handwashing Elimination of Urine Return Give and Remove Bedpan/Urinal Nutrition Servicing, Feeding, and Monitoring Return Servicing, Feeding, and Monitoring First Aid for the Choking Victim
Day 3	Temperature, Pulse, and Respiration Taking a TPR Blood Pressure Taking a Blood Pressure Reading
	Clinical Practice Time
	Review for Final Examination
Day 4	Personal Care for the Resident Bedmaking—Unoccupied/Occupied Return Demonstration Bedmaking Bedbath Tub Bath and Shower Bath Backrub/Skin Care Dressing and Undressing Return Demonstration Dressing and Undressing Oral Hygiene Return Demonstration Oral Hygiene
Day 5	Perineal Care Hair Care Return Demonstration Hair Care Nail Care Return Demonstration Nail Care Ambulation Return Demonstration Body Mechanics Return Demonstrations Lifting and Moving Turn and Position the Resident Return Demonstration Turn and Position Principles of Transferring Residents

Transfer Activities
Principles of Restorative Nursing
Range of Motion Exercises

Day 6

Temperature Pulse and Respirations
Taking a TPR
Blood Pressure
Taking a Blood Pressure Reading

Clinical Practice Time
Review for Final Examination

DAY 7

Chart on Medical Record
Observe and Report
Using Plan of Care
Observe, Measure, Record I & O fluids
Catheter Care
Return Demonstration Catheter Care
Give and Remove Urinal and Bed Pan
Administration of Enema
Return Demonstration Enema

Day 8

Isolation Technique
Elimination Stool
Weight and Height
Return Demonstration Weight and Height
Admissions
Transfer and Discharge

Day 9

Temperature, Pulse, and Respirations
Taking a TPR
Blood Pressure
Taking a Blood Pressure Reading

Clinical Practice Time
Review for Final Examination

Day 10

The Aging Process and Related Health Problems
Emotional Needs
Dealing with Mental Confusion
Activities in the Long-Term Care Facility
Death and Dying

Day 11

Applying Heat and Cold
Applying a Warm Moist Compress
Applying an Ice Bag or Ice Cap
Return Demonstrations Warm Moist Compresses, Warm Bottle, Ice Bag

Preventing and Caring for Decubitus Ulcer
Oxygen Therapy
Return Demonstration Oxygen Therapy

Day 12

Temperature, Pulse, and Respirations
Taking a TPR
Blood Pressure
Taking a Blood Pressure Reading

Clinical Practice Time
Review for Final Examination

Teaching Methods for Nurse Assistant in Long-Term Care Training Program

The following is an overview of some of the teaching methods specific to in the Nurse Assistant in Long-Term Care Training Program. See general teaching methods in Section 2, Teaching Strategies, page 2.1.

The course uses the Lesson Plan format, which provides a series of lessons complete with objectives, outlines, handouts, evaluation sheets, questions, and interaction items. See the Lesson Plan discussion in this manual, page 2.7 for more information on this concept.

Teaching a Theory Lesson

Consult the handouts on teaching for guidance in theory instruction.

Students always perform better when they have clear objectives. You should always go over them orally and make certain students understand how to obtain the objectives outlined in the lesson.

Ask interaction item questions where indicated in the lesson. Have students perform supplemental exercises or substitute more appropriate learning exercises of your own. Discuss evaluation items and check to see that students are looking up the answers.

Tie everything up at the end of the lesson with a summary and try to connect what is learned with the next lesson.

Teaching a Clinical Procedure

There is only one objective for a clinical procedure: perform it according to steps of procedure outlined in the textbook. Nothing less than 100% competency is acceptable.

Information necessary to understand the procedure must be given in a prior theory lesson or in the introduction to the lesson.

Go over the steps of procedure orally. Say only what is written in the text. DO NOT ad lib or attempt to provide additional information at this time. It is tough enough for students to learn the steps without being confused by extraneous information.

Demonstrate the procedure. You should have all equipment already set up before beginning the demonstration. These are adult learners, and they do not want to waste time looking for and setting up equipment.

Students love it when you miss a step of procedure when you demonstrate. Out-smart them by having a student read each step of the procedure when you demonstrate it, or by writing each step of a proce-

dure on the blackboard or on a large piece of paper taped to the wall.

Students should return demonstrations as soon as possible after you show the procedure. Return demonstrations may be supervised by an RN or LPN on-the-job supervisor and can be done in the clinical laboratory or on the resident's unit, if the student has completed the orientation module.

Making Clinical Assignments

Before assigning students to a resident, you should evaluate them in the clinical laboratory to make sure they have mastered the particular competency called for. The pink evaluation sheets should be completed and signed by you.

To assign a student, first prepare a list of student names and their schedules together with a list of competencies you want each student to experience and give it to the charge nurse.

Set up a conference with the charge nurse to determine if assignments are available to meet your student's needs. You may also want to check with the staff. Write down the assignment information:

- Name of resident.
- Room number.
- Treatment.
- Any disorder or condition the resident may have.
- Likes and dislikes.
- Activity.

Next explain your expectations to the students, orient them to the unit and assign them to residents. Hold a pre-conference meeting to check attendance, student understanding of the procedure and to review important points. Remember, you are responsible for making certain students are supervised and competent for all procedures.

Students may perform procedures on residents other than the ones assigned. Resident assignments may also be switched as needed to ensure students have the opportunity to perform a required procedure.

Clinical Supervision

The student enrolled in the Nursing Assistant in Long-Term Care course is usually just beginning in the nursing profession. Many have never had patient contact and do not know the language, traditions and general behavior expected of a nurse.

For this reason, it is important that a skilled nurse be responsible for the clinical supervision of the student. Your goal during this period of training is to help the student become self-sufficient.

The steps of clinical supervision are:

1. Instructor makes a quick check of residents assigned to students. Remember, you are responsible for their actions.
2. Evaluate the time needed for procedures.
3. Check the weakest student and the resident most in need first.
4. Instruct student to review the procedure before starting to collect equipment to perform it.
5. Re-emphasize important steps. Do not forget handwashing and gloves.
6. Have student collect equipment.
7. Student introduces instructor and self to resident. The resident must be aware that a student or trainee is going to perform the procedure.
8. Student explains procedure to resident.
9. You should talk only when absolutely necessary when the student performs a procedure. Excessive talking will cause the resident to lose confidence in the student.
10. Use your hands—or better—a cotton tip applicator or tongue blade to direct and guide the student.
11. Don't tell the student what to do. This will upset both the student and resident.
12. Don't rush the student. We learn by doing, so allow students to perform all steps of procedure at their own pace.
13. **Never** tell students what they did wrong in front of a resident or staff.
14. After you and the student are out of the room, and you are in a quiet area where others cannot overhear your conversation, ask the student to evaluate his or her performance.
15. Conference the student to give immediate feedback on performance. Start with what was done right, then bring up areas that need improvement. End with praise.

If a lot of mistakes were made, the student should repeat a return procedure as soon as possible. Do not pass a student until there is 100% competency.

Challenging the Competency Evaluation for Nurse Assistant in Long-Term Care

Persons who already have extensive training equivalent to the required classroom hours and on-the-job training in long-term care, may be eligible to "challenge" the Nurse Assistant in Long-Term Care competency evaluation (bypass the course and take the evaluation).

Those eligible to challenge include:

- Persons who were enrolled in a professional (RN) or practical (LPN) nursing education program for at least four months or who are enrolled in such a program and who have completed the Fundamentals of Nursing course.
- Professional Nursing or Practical Nursing licensure candidates who have failed state licensure examinations.
- Persons from other states who can show documentation of successful completion of a similar state-approved course.
- Foreign students who have completed a nursing program outside the United States and who are awaiting licensure must complete the orientation module of the course and then may challenge.
- Persons trained in acute care sections of hospitals as nurse assistants or persons trained as psychiatric aides must complete the orientation module with special emphasis on geriatric residents' needs, residents' rights, and orientation to the facility. They must complete the 100 hours of on-the-job training in a long-term care facility or extended care unit of a hospital and then may challenge.
- Persons trained in an extended care unit of a hospital and who have been employed in one for at least 12 months and who submit a letter of recommendation from the administrator or director of nursing documenting their training. They must first complete the units on residents' rights and care of the confused resident.
- Persons employed by a skilled nursing or intermediate care facility as nurse assistants prior to January 1, 1980 for at least three years and who submit a recommendation from the administrator or director of nursing.
- Persons who, immediately prior to employment, worked as nurse assistants for at least three years in a different nursing facility and who can provide documentation of continuous employment there prior to January 1, 1980, and who submit a recommendation from the administrator or director of nursing of that facility.
- Other persons whose background, education, and training in gerontology and health occupations includes components of the approved training curriculum may be allowed to take selected por-

tions of the course and challenge the competency evaluation as determined by evaluation of their credentials by the supervisor of health education of the Division of Aging.

Persons not eligible to challenge the competency evaluation are allied health care personnel: emergency medical technicians, medical laboratory technicians, surgical technicians, central supply technicians, and dental auxiliaries.

How to Challenge

Applicants who want to challenge the final nurse assistant examination must submit a request, in writing, to the Division of Aging. The letter should include place, beginning date, and termination date of employment as well as documentation of certification in another state and description of the nurse assistant course, if applicable.

The letter should be sent to:

Health Care Educational Specialist
Division of Aging
P.O. Box 1337
615 Howerton Court
Jefferson City, MO 65102-1337
(314) 751-3082

The Division of Aging then sends a letter stating whether or not the applicant is eligible to challenge. Those persons permitted to challenge must make arrangements to do so within 60 days of employment and must have successfully challenged the final examination within 120 days of employment. Permission letters not used within 120 days are invalid and another request for challenge must be made.

If the applicant is eligible, she or he should call and make an appointment with the school or long-term care facility, and bring the letter, documentation of course work, and employment history to the appointment. A time to take the final competency examination will then be scheduled.

Then the applicant should purchase the textbook, *Nurse Assistant in a Long-Term Care Facility,* and complete all questions in the textbook. The applicant must bring to the exam a 1" x 1" picture in an envelope with name, address and phone number printed on the outside of envelope.

The final competency examination consists of eight procedures which include vital signs and a 50-question written or oral exam. Students must perform the eight procedures according to the steps outlined in the textbook. One hundred percent accuracy is required on this part; students must successfully answer 40 out of 50 oral or written questions.

Records

Upon completion of the competency exam, the instructor sends grade and date of attendance, completed competency form and score sheet (see

forms in the back of this section), and fees to one of the nursing home associations listed on pages 3.14 and 3.15 for certification. See the checklist in this section for procedures for certification.

In order to fully understand the procedures for challenging the Nurse Assistant competency evaluation, you should attend a Nurse Assistant Teacher/Trainer workshop. To find out workshop dates or to get answers to questions you may have, check with the Division of Aging.

NURSE ASSISTANT IN LONG-TERM CARE

STUDENT HANDBOOK

_____

Name of School

I CERTIFY THE CONTENT AND POLICY TO BE TRUE AND CORRECT.

_____

Signature

(Year)

(This handbook is provided as an example.)

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Foreword

The purpose of this handbook is to make available to each trainee an overview of the Training Program for Nurse Assistant in Long-Term Care provided by _____(Name of School)_____, approved by the state Department of Elementary and Secondary Education, Jefferson City, Missouri.

This information will acquaint the student with the philosophy and purpose of this program. It will permit students to know, in advance, school policies and units of the course.

General Statement

You are now a student in the _____(Name of School)_____ Nurse Assistant in Long-Term Care Training Program.

This program, as all other public education, is operated on a not-for-profit basis.

Notice of Non-Discrimination

_____(Name of School)_____ is committed to a policy of non-discrimination on the basis of race, age, sex, religion, color, national origin, creed, handicap, or marital or parental status. This policy is in effect for admissions, educational programs, activities, and regulations, as specified by Federal and State laws and regulations.

Any person believing they have a claim pursuant to Section 504 or Title IX should direct all inquiries to: _____Name of Person, Address, Phone Number_____.

Statement of Philosophy

It is the right of every individual to receive optimum health care delivered by trained personnel. Federal and State laws and regulations are adopted to insure quality care to residents of long-term care facilities. The Nurse Assistant acquires knowledge and skills through a prescribed educational program. The resident's welfare is the responsibility of the Nurse Assistant as well as the other members of the long-term health care team.

Objectives

Upon completion of this course, the Nurse Assistant will be able to:

A. Develop good personal habits.

B. Recognize the Nurse Assistant's role as it fits into the organizational structure of a long-term care facility.

C. Identify responsibilities of the Nurse Assistant to the resident and health care team.

D. Demonstrate basic skills and techniques in performing uncomplicated nursing procedures, according to the program standards.

E. Organize and administer nursing care to residents, based on a plan of care and/or direction from charge personnel.

F. Demonstrate knowledge of patient's/resident's rights in assisting residents with their daily activities.

G. Demonstrate ability to apply restorative nursing techniques to assist the handicapped resident to return to his/her best health potential.

History of the Course

The enactment of the Omnibus Nursing Home Act mandated the education of Nursing Assistants.

Section 27 of Senate Bill Numbers, 328, 432, 35, and 419, (Omnibus Nursing Home Act) states: "Each Nursing Assistant hired to work in a skilled nursing or intermediate care

facility, after January 1, 1980, shall have successfully completed a nursing assistant training program, approved by the department, or shall enroll in the first available approved training program, which is scheduled to commence within sixty days of the date of the Nursing Assistant's employment. Training programs shall be offered at a location most reasonably accessible to the enrollees in each class. The program may be established by the skilled nursing or intermediate care facility, by a professional organization, or by the department, and training shall be given by the personnel of the facility, or a professional organization, or by the department, by a junior college, or by the vocational education department of any high school.

"As used in this section, the term 'nursing assistant' means an employee, including a nurse's aide or orderly, who is assigned by a skilled nursing or intermediate care facility, to provide or assist in the provision of direct resident health care services under the supervision of a nurse, licensed under the nursing practice law, chapter 335, RSMo. This action shall not apply to any person, otherwise licensed, to perform health care services under the laws of this state. It shall not apply to volunteers or to members of religious fraternal orders, which operate and administer the facility, if such volunteers or members work without compensation.

"The training program shall consist of at least the following: (1) A training program consisting of seventy-five (75) class hours of training on basic nursing skills, clinical practice, resident safety and rights, and the social and psychological problems of residents, and one hundred (100) hours supervised and on-the-job training."

Because of this statutory mandate, the curriculum for the Nurse Assistant in Long-Term Care has been developed and approved in a coordinated effort, between the Division of Aging and the Department of Elementary and Secondary Education.

The first Nurse Assistant in Long-Term Care course began March 11, 1980.

Admission Requirements and Procedures

1. Application must be made, in person, to the _____(Office, School, Address)_____.
2. Applicants will be accepted on a first-come, first-serve basis, and preference will be given to employees of long-term care facilities. Class size limited to fifteen (15).
3. Applicants are selected without regard to age, race, sex, color, national origin, creed, handicap, or marital or parental status.
4. Eligibility requirements:
   a. Must be 18 years of age, or currently enrolled in a secondary health services occupations program in an area vocational technical school or comprehensive high school.
   b. Must show proof of identity and submit a letter of reference from place of employement or from a teacher.
5. Preference will be given to veterans who meet the criteria of the program.

Tuition Refund Policy

1. The cost of _____ is nonrefundable after the starting date of class, as the program must depend upon full enrollment to meet the costs of the program operation.

2. Should the student withdraw between enrollment date and the starting of the class, and a satisfactory replacement can be found prior to the start of the class, a total of _____ will be refunded, *if paid in advance*. The Adult Health Occupations Education Admissions Committee is solely responsible for determining the eligibility of a replacement student.
3. The textbook fee of _____ is non-refundable after date of issue.
4. Tuition: _____. Registration fee: _____. Liability insurance: _____
5. Final certification cost is _____.

Holidays

Classes falling on a school holiday will be rescheduled.

Course Arrangement

The program of study extends for 75 hours of theory, usually __(Hour)__ to _____, _____(Days of Week)_____. Clinical follows the 75 hours of theory. The student must complete 100 hours of clinical practice in the long-term care facility, designated by the school. This clinical practice will be under the direct supervision of the Registered Nurse who is your instructor. Following completion of clinical practice, the student will be tested by the course instructor and a state certified Nurse Examiner. Total hours: 175.

Units of Instruction

The Nurse Assistant
Understanding the Elderly
Safety
Food Service
Personal Care
Elimination
Restorative Nursing
Special Procedures

Examination and Grading Policies

Program scale for grading:	90-100	A
	89-90	B
	70-79	C
	60-69	D
	0-59	F

It is required that students maintain a 70% average in theory. Students are not eligible to do clinical if they have not passed theory. There will be three quizzes and one final in theory. A 70% average score is required to be eligible for the final examination.

The student is expected to contact the instructor for a written make-up test schedule. A copy will be given to the student and a copy will be kept in the student's file. Students failing the final certification must retest within ninety days.

Dismissal From Course

The instructor may recommend the dismissal of any student whose health, personal hygiene, conduct, scholastic standing, or lack of aptitude for Nurse Assistant make it inadvisable for him or her to continue in the course.

Conduct for which students may be terminated includes, but is not limited to:

1. Insubordination.
2. Abuse of drugs and/or alcohol.
3. Leaving school premises without instructor's knowledge and/or permission, while assigned to classroom.
4. Inconsistent adherence to written school policies. (Stealing, cursing, physical combat with another individual, threatening another individual, etc.)

Transcripts

A copy of the final transcript or other school record forms will be forwarded to any employer, college, or school upon written request of the graduate and the payment of $_____ per copy. The original transcript remains the property of _____(School Name)_____ .

Completion of Course

A certificate will be awarded to the student who successfully completes the course. Final records will be kept in the _____(School Name)_____ office.

Attendance

1. There will be only one theory absence allowed during the course. More than one absence will result in automatic termination from the course, with no reimbursement of tuition.
2. It is expected that the student will be on time for all classes.
3. Students must call____(Telephone Number)____ when illness or emergency needs require an absence from class.

Student Welfare and General Policies

1. Students may not smoke in the classroom, but only in designated areas of the building where smoking is allowed.
2. To maintain a professional relationship, students shall be called by their last names, i.e., Miss Smith.

Uniform Standards

1. Students will be responsible for having a watch with a second hand during theory class.
2. Students are responsible for obtaining their own white uniform, white hose, and white nurse's shoes.

3. Uniform and shoes are to be clean.
4. White hose should not have runs.

Classroom Requirements

1. Assignments shall be completed and handed in on standard size (8 1/2 x 11) lined paper, written in blue or black ink/ballpoint or typewritten. Material must be double spaced.
2. Students shall hand in assignments on time. Instructor(s) shall provide specific deadline dates.
3. Notebooks and other writing equipment are provided by the student.
4. Children, relatives, friends, or employees are not permitted to be in attendance during school hours.

STATEMENT

I have received the Nurse Assistant in a Long-Term Care Facility Handbook and have had the handbook explained to me. I understand that more than one (1) absence will result in automatic termination from the course.

_____	_____
Instructor's Signature	Student's Signature
_____	_____
Date	Date

Score Sheet For Nurse Assistant Examination

Student name		Social Security Number
Nursing facility		Date of Birth
Attendance	Make-up	Total hours: Classroom Clinical
Test scores: 1. 2. 3. (to be completed by instructor before exam)		
Final Exam: Date	Appearance	Organization
Work Habits		

PROCEDURE: Evaluate procedure knowledge, safety, nurse-patient interaction, encourage self-help

	END RESULT
1. T. (Rectal & Oral) P.R.	
2. B.P.	
3.	
4.	
5.	
6.	

25 oral questions asked	Number of questions answered correctly

Approved _____

Not approved _____

SIGNATURES

_____
R.N. Examiner

_____
R.N. Instructor

_____
Administrator or Director of Nursing

Use back of sheet for remarks

Competencies for Nurse Assistant

Name of Student _____
(Ms., Mrs., Mr.) (Last) (First) (Middle) (Maiden)

Permanent Address _____ Soc. Sec. No. _____

Training Site _____ Date of Birth _____

Date Started _____ Date Completed Basic _____

Theory Grade _____ OJT Start _____ OJT Completed _____ Final Grade _____

Instructor(s): Basic _____
(Signature)

Supervised OJT _____
(Signature)

Examiners: _____ _____
(Signature) (Signature)

Additional comments: (Nurse Assistant Instructor and Supervisor OJT)

_____

_____

_____

_____

_____

Competencies for Nurse Assistant (cont'd)

Competency	Date of Instruction	Competency Achieved ( )	Number of Supervised OJT Hrs.
Safety			
1. Administer first aid to the conscious choking victim.			
2. Administer first aid to the unconscious choking victim.			
3. Wash hands. Gloving.			
Food Service			
4. Feed the helpless resident.			
5. Feed by mouth with a syringe.			
Personal Care			
6. Give bed bath.			
7. Give tub bath (see also 18).			
8. Give shower bath (see also 19).			
9. Make unoccupied bed.			
10. Make occupied bed.			
11. Assist with oral hygiene.			
12. Administer oral hygiene to helpless/unconscious resident.			
13. Clean dentures.			
14. Shave/assist resident with shaving.			
15. Give back rub/skin care.			
16. Give perineal care to male resident.			
17. Give perineal care to female resident.			
18. Give shampoo during tub bath.			
19. Give shampoo during shower bath.			
20. Give bed shampoo.			
21. Comb/brush hair.			
22. Give fingernail care.			
23. Give toenail care.			
24. Dress/undress resident.			
Elimination			
25. Give catheter care.			
26. Change drainage bag.			
27. Give/remove urinal.			
28. Give/remove bedpan.			
29. Administer enema.			
30. Obtain routine specimen.			
31. Obtain clean catch/midstream urine specimen.			
32. Obtain urine specimen from closed urinary drainage system.			
33. Obtain stool specimen.			
34. Obtain sputum specimen.			
35.			
36.			
Restorative Nursing			
37. Move/assist resident to head of bed.			
38. Move helpless resident to head of bed.			
39. Move resident to side of bed.			
40. Turn resident toward NA.			
41. Turn resident away from NA.			
42. Position resident in prone position.			
43. Transfer resident from bed to chair.			
44. Transfer resident from chair to bed.			
45. Transfer resident with mechanical lift.			
46. Ambulate resident using a gait belt.			
47. Ambulate resident using a walker.			
48. Ambulate resident using a cane.			
49. Give range of motion exercises.			

Competency	Date of Instruction	Competency Achieved ( )	Number of Supervised OJT Hrs.
Special Procedures			
50. Take oral temperature.			
51. Take rectal temperature.			
52. Take axillary temperature.			
53. Count pulse and respirations.			
54. Measure blood pressure.			
55. Weigh resident.			
56. Measure resident.			
57. Apply warm moist compress.			
58. Apply ice bag/ice cap.			
59. Apply heat lamp.			
60. Give decubitus care.			

101.71 hours

(5 = high)	1	2	3	4	5
Personal Professional Competencies					
61. Practices good personal hygiene.					
62. Maintains good personal health.					
63. Wears appropriate clothes and accessories.					
64. Exhibits professional behavior.					
65. Maintains confidentiality.					
66. Reports to work on time.					
67. Uses facility's procedure for absenteeism.					
68. Works well with others.					
69. Communicates well with others. Is courteous.					
70. Incorporates acceptable techniques when caring for confused residents.					
71. Respects resident's rights in assisting with activities of daily living.					
72. Utilizes plan or care to meet resident's needs.					
73. Organizes work in a sequential manner.					
74. Understands limitations, requests assistance when appropriate.					
75. Maintains a safe environment for residents.					
76. Uses appropriate body mechanics.					
77. Reports and records pertinent information to appropriate personnel.					

✣ Medication Technician Training Program

Drug therapy plays an extremely important role in the care provided by a long-term care facility. Because it is so important, preparing, administering, and charting medications have become a full-time job—a job for the Medication Technician.

To assure quality care, the state has developed comprehensive rules and regulations governing the training of the Medication Technician employed in a long-term care facility.

This program is designed to meet those requirements and teach skills in medication administration of non-parenteral medications. The student will then be qualifed to administer medications and assist licensed practical nurses or registered professional nurses in drug therapy.

This course does not include insulin therapy, which is a separate course Medication Technicians can take once once they are certified. See Section 6 for Insulin Administration details.

What's inside:

Page

An overview of the training program including necessary student and instructor qualifications 4.1

A checklist for implementing the course 4.5

A sample teaching schedule 4.11

Sample forms often used with this course ..... Back of this section

In addition, see the Rules and Regulations section of this manual for legal information concerning the Medication Technician Training Program.

An Overview of the Medication Technician Training Program

The Medication Technician Training Program is designed to train students to prepare, administer, and chart medications given by all routes, except the parenteral route. It requires at least 40 hours of classroom training and eight hours of clinical practice under the supervision of a licensed nurse.

NOTE: Students are not allowed to administer medications until they have successfully completed the course and passed the examination.

The Course

In addition to the skills mentioned above, students will also learn to:

- Observe, evaluate, report, and record responses of residents to medication.
- Identify proper medication control and storage procedures.
- Identify the side effects, interactions, and nursing implications of common medications.
- Identify the lines of authority and areas of responsibility.
- Identify appropriate reference materials.

The course is based on the *Medication Technician* textbook which uses the Lesson Plan format (see page 2.7 for information on this concept). There are both student and instructor versions of this text. See the Resources section of this manual for ordering materials or contact:

Instructional Materials Laboratory
2316 Industrial Dr.
Columbia, MO 64202
1-800-669-2465 (Toll Free)

Student Qualifications

To qualify for this course, students must be 18 years old and have a high school diploma or GED certificate with scores listed. They must score 75% on the Basic Skills Test (BEST) administered by an educational agency and be employed one year as a Certified Nurse Assistant.

If employment is less than one year, the student must have a letter of recommendation from the administrator or director of nursing of the long-term care facility. It is recommended that no CNA with less than six months of experience be considered for the course.

Challenging the Examination

People who can document comparable training and experience may be able to "challenge" the examination, which allows them to bypass the course and take the examination for certification.

Students eligible to challenge the examination are:

- Students enrolled in a professional nursing school or practical nursing program who have completed the medication administration course and have a letter of endorsement from the director of the program.
- Individuals who have successfully completed a professional or practical nursing program, but who have failed the RN or LPN licensure examination.
- Individuals who have evidence of successful completion of a state-approved medication technician course while working as a psychiatric aide in a Missouri state school or hospital, and have previously completed or challenged the approved Nurse Assistant Training Program.
- Individuals employed in a facility licensed or operated by the Missouri Department of Mental Health.

Students who may be eligible to bypass both the course and the examination are:

- Individuals trained and certified by Missouri Division of Health Institutional Advisory Nurses prior to 1978.
- Individuals certified through the Department of Elementary and Secondary Education using approved Division of Health Occupations curriculum (these cards are on file with the Division of Aging).
- Individuals who have successfully completed a professional or practical nursing program and have not yet taken licensure examination.
- Individuals who have completed an approved medication technician course in another state and who submit a letter of recommendation from an administrator or director of nursing in a facility where they served as a Medication Technician.

To challenge, individuals must submit a request in writing and any applicable documentation to:

Health Care Education Specialist
Division of Aging
P.O. Box 1337
Jefferson City, Missouri 65102-1337

If the request is approved, a letter will be sent to the individual from the Division of Aging. This document must then be presented to the training agency in order to challenge.

Instructor Qualifications

To qualify to teach the Medication Technician Training Program, an instructor must:

- Currently be an RN licensed in Missouri or hold a current temporary permit from the Missouri State Board of Nursing.
- Meet state certification requirements to hold a current teaching certificate from the Department of Elementary and Secondary Education.
- Complete a teacher education workshop on how to implement the program (contact the Division of Aging or Department of Elementary and Secondary Education for workshop dates). The instructor must submit a photocopy of current nursing license and vita of work experience prior to attending the workshop.
- Be responsible to a sponsoring education agency (a voc-tech school, community or junior college, or approved four-year educational institution).

When the instructor is an employee of the long-term care facility in which the training is conducted, a qualified RN approved by the sponsoring educational agency shall conduct the final examination. This examiner should meet the same qualifications as the instructor.

Sponsoring Educational Agency

The Medication Technician Training Program must be sponsored by an educational agency such as an area vocational-technical school, comprehensive high school with existing health occupations program, community or junior college, or an approved four-year institution.

Classrooms used for training shall contain sufficient space, equipment, and teaching aids to meet the course objectives. For general classroom suggestions, see page 2.3 of this manual.

Suggested equipment, in addition to instructor and student guides and reference books, includes:

- Audiovisual materials and equipment (overhead or slide projector and screen; or television and video tape player). This is optional.
- Medication trays.
- Cart to transport medications.
- Mock medicine cupboard with lock.
- Form holders.
- Drug samples and containers.
- Emergency tray.
- Lubifax.
- Medicine cards.
- Gloves.
- Supplies (record forms).

- Blood pressure apparatus.
- Skeletorso (optional).
- Medicine cups (paper souffle).
- Calibrated medicine cup.
- Medicine dropper.
- Medications (assorted pretend medications).
- Cotton balls.
- Tissue.

See Section 8, Resources, for companies that can supply this equipment.

Checklist for Medication Technician Training Program

Use this checklist **after** the course has been set up, the instructor found, students recruited, facility and equipment acquired, students notified of where and when the course will be held, attendance and grade books prepared, and textbooks ordered. See page 2.19 of this manual for instructions on setting up a course.

The Medication Technician Training Program is unusual in that it relies on a partnership between a sponsoring school and the long-term facility. The following checklist suggests procedures the school, facility, and instructor should follow.

Prior to the First Class

Facility and Instructor Responsibilities

- ☐ Complete and return training agreement form to school.
- ☐ Instructor completes FV-1 short form and sends to school to acquire teacher certification.
- ☐ Send a copy of instructor's RN license, Social Security card, resume, nursing and college transcripts, and certificate from a "Train the Trainer" workshop to the school.
- ☐ Schedule BEST test with school.
- ☐ Notify applicants of date, time, place, and requirements of BEST test (see sample letter and application included in the back of this section). The test will take three to four hours, but there is no time limit.
- ☐ Provide list of names, phone numbers, Social Security numbers of students, and teaching schedule to school.

School Responsibilities

- ☐ Send agreement form to facility (see the back of this section for a sample form).
- ☐ Sign FV-1 form and send it and a cover letter which states starting and finishing dates of class to Department of Secondary and Elementary Education (see address, page 4.10) for certification.
- ☐ Send a letter to the Division of Aging (see address, page 4.10) informing them of instructor chosen and workshop attendance date.
- ☐ Administer and grade BEST test.
- ☐ Notify student and facility of pass or fail.
- ☐ Set up a file for each student.

- ☐ Assist instructor with setting up class. Go over grades, attendance, and the three quizzes required.
- ☐ Select an examiner.
- ☐ Prepare files forms for the first day.

The following items can be done prior to the first day of class or the same day but prior to class time.

- ☐ Check that the contract is signed.
- ☐ Bill the facility.
- ☐ Check instructor's quizzes to make sure all test questions are from the book.
- ☐ Review procedures for teaching of an information lesson and a demonstration lesson with instructor.
- ☐ Provide VED and course evaluation forms.

The First Day

School Responsibilities

- ☐ Turn student file over to instructor.
- ☐ Start the class.
- ☐ Check all pre-entrance requirements and notify student of any missing information. The following information is required:
  - Completed application.
  - 1" x 1" photo.
  - VED form.
  - Copy of CNA card.
  - Copy of Social Security card.
  - Official high school transcript or GED scores.
  - BEST test scores.
  - Reference from director of nursing if employed less than 1 year.
- ☐ Complete first part of VED form.
- ☐ Explain the requirements of the course.
  - Students shall achieve an average of 85% overall on three written examinations in the course curriculum to be eligible for the final examination.
  - All evaluation items must be completed.
  - Students will take a written final exam of 50 questions based on course objectives. A minimum score of 85% is required.
  - A minimum of 8-10 hours of clinical practice integrated into the course is required.

- A final two-hour practicum examination is given over the preparation, administration, and recording of medications.

  The practicum shall be administered under the direct supervision of the instructor and an outside examiner and the person responsible for administering medication in the long-term care facility. Testing on medications not available in the facility is done in a simulated classroom situation. Students are expected to score 100% on this evaluation.

☐ Discuss the length of the course. A minimum of 40 hours theory and 8-10 hours of clinical practice is required before the student is eligible to take the competency evaluation and written exam. Any missed time must be made up.

☐ If a student who is not challenging fails the final examination, he or she can take it one time again within 90 days without repeating the course. Challenging students who fail may not retake the exam—they must enroll in the course.

☐ Set class rules. Go over written rules verbally. Have students sign a form stating that you have explained the rules and they have understood them.

Example: I have had the rules and regulations for being a student in the course, Medication Technician, explained to me and I understand what is expected of me to successfully complete the course.

Student Signature: _____

Date: _____

Instructor Signature: _____

It's a good idea to develop a student handbook which outlines the rules and conduct that are expected of the students. See the back of this section for an example of a student manual.

☐ Pass out textbook, *Medication Technician.*

☐ Explain how to use the textbook. The text is in a Lesson Plan format. See the Lesson Plan section of this manual, page 2.7, for more information on this concept.

☐ Pass out class schedule and turn class over to instructor.

During the Course

Instructor Responsibilities

☐ Teach the course, covering the Lesson Plans in the textbook. See the Teaching Schedule, page 4.11, for an example of how the material might be covered.

☐ Administer three quizzes, grade them, and record them.

☐ Complete evaluation forms.

- ☐ Keep attendance.
- ☐ Schedule films with school.

School Responsibilities

- ☐ Be available for consultation.
- ☐ Confirm final written and practicum schedule with instructor.
- ☐ Provide films if needed.
- ☐ Prepare 50 questions for the final examination and make enough copies for students. Prepare answer sheet.

Evaluation

Facility and Instructor Responsibilities

- ☐ Schedule final exam and practicum with the school.
- ☐ Check to be sure all pink evaluation sheets are completed, signed and dated.
- ☐ Schedule an examiner from the school.
- ☐ Send list of eligible students' names to the school.
- ☐ Set up lab for final practicum exam.
- ☐ Tell students what to expect for practicum and final written exam.
- ☐ Average students' quiz grades—85% required to take the final.

School, Facility, and Instructor Responsibilities

- ☐ Administer final 50-question written exam. 85% required to take practicum.
- ☐ Give practicum. 100% grade is required to pass.
- ☐ Complete transcript which includes competencies.
- ☐ Complete VED form.
- ☐ Examiner picks up student records and files to take to the school.

Certification

School Responsibilities

- ☐ School issues certification card and certificate (the examiner may do this at evaluation). See examples in the back of this section.

Instructor Responsibilities

- ☐ (Optional) Seek registration from a nursing home association or from a public education agency in the health occupations system, or both.

Each agency has its own form. Prepare each form according to its instructions. All agencies require the following information:

- Typed, completed information.
- Signatures of examiner and instructor.
- A photo of student in an envelope with the student's name on it. (Face must be no larger than 1" x 1", and there should not be writing on either the front or back of the photo.)
- Fees (checks are accepted only from vo-tech schools or colleges).
- Copies of competencies and score sheet.

Nursing home associations include:

Missouri Health Care Association
236 Metro Drive
Jefferson City, MO 65109
Phone: (314) 893-2060

Executive Director
Missouri League of Nursing Home Administrators, Inc.
1411 Southwest Boulevard
Jefferson City, MO 65109
Phone: (314) 634-5345

Missouri Association of Nursing Homes for the Aging
6925 Hampton Avenue
St. Louis, MO 63109
Phone: (314) 353-9050

Final Records

School Responsibilities

- ☐ Maintain records—transcript, application, VED form, copy of instructor's certificate for attending workshop.
- ☐ Provide copy of transcript or certificate of completion to student and long-term care facility.
- ☐ Submit to the Division of Aging and the Department of Elementary and Secondary Education:
  - Copy of CNA certificate for each CMT candidate.
  - Names, addresses, birth dates, and Social Security numbers of students who have successfully completed the course.
  - Copy of instructor's certificate for attending "Train the Trainer" workshop.
- ☐ The school must maintain in its files:
  - Copy of each student's high school diploma or transcript showing graduation date, or passing score on GED.

- A record of 75% passing score on a BEST test for the math, language arts, and reading sections.
- A letter verifying one year's employment as a Nurse Assistant or written recommendation by the administrator or Director of Nursing at the place of employment.

Send to:

Health Care Educational Specialist
Division of Aging
P.O. Box 1337
615 Howerton Court
Jefferson City, MO 65102-1337

Supervisor, Health Occupations Education
Department of Elementary & Secondary Education
Box 480
Jefferson City, MO 65102

Medication Technician Training Program
Sample Teaching Schedule

Date _____

1. Take care of preliminary paperwork associated with starting the class (see Medication Technician Checklist in this section).
2. "Becoming a Medication Technician," Lesson 1, pp. 1-9.
3. "Long-Term Health Care Team," Lesson 2, pp. 11-39.
4. "State and Federal Control," Lesson 3, pp. 41-89.
5. Students complete evaluation items (pink sheets) at end of Lessons 1, 2, and 3 (pp. 7, 19, 20, 21).

Date _____

Quiz: Lessons 1, 2, and 3

6. "Medical Terminology and Abbreviations," Lesson 4, pp. 91-103.
7. "Dosage, Measurements, and Drug Forms," Lesson 5, pp. 109-118.
8. Students memorize H.O. 12, pp. 123-124.
9. "Transcribing Physicians Orders," Lesson 6, pp. 125-153.
10. Show film "Transcribing Physicians Orders."
11. "Packaging, Storage, and Accountability," Lesson 7, pp. 155-163.
12. "Body Systems," Lesson 8, pp. 167-197.
13. Students complete all evaluation items (pink sheets) Lessons 4, 5, 6, 7, 8.

Date _____

Quiz: Lessons 4, 5, 6, 7, and 8

14. "Drug Classifications," Lesson 9, pp. 199-307.
15. Students complete sample Drug Cards (see example in the back of this section) assigned by instructor. Due date _____.
16. "Problems of Observation," Lesson 10, pp. 215-316. H.O. 36, 37, 38. Demonstrate H.O. 38.
17. Students return demonstration.
18. "Basic Guidelines," Lesson 11, pp. 317-331. Give students a make-believe incident and have them complete an incident report form.
19. "Special Categories of Drug Administration," Lesson 12, pp. 333-348.
20. Students complete evaluation items (pink sheets), Lessons 9, 10, 11, and 12. Go over H.O. 35, pp. 227-307.

Date _____

Quiz: Lessons 9, 10, 11, and 12

21. "Prepare, Administer, Report, and Record Oral Medications," Lesson 13, pp. 349-357.

Date _____

22. Students return demonstration in lab: Prepare, Administer, and Report.
23. "Prepare, Administer, Report, & Record Rectal Medications," Lesson 14, pp. 359-367.
24. Students return demonstration in lab: Rectal Medications.

Date _____

25. Clinical—4 hours, Prepare and Administer Meds.
26. "Prepare, Administer, Report, & Record Vaginal Medication," Lesson 15, pp. 369-377.
27. Students return demonstration in lab: Vaginal Medications.
28. "Prepare, Administer, Report, & Record Otic Medication," Lesson 16, pp. 379-389.
29. Students return demonstration in lab: Otic Medications.

Date _____

30. Clinical—4 hours, Administer Medication.
31. "Prepare, Administer, Report, & Record Ophthalmic Medication," Lesson 17, pp. 389-397.
32. Students return demonstration in lab: Ophthalmic Medications.

Date _____

33. "Prepare, Administer, Report, & Record Nasal Medication," Lesson 18, pp. 399-406.
34. Students return demonstration in lab: Nasal Medication.
35. "Administer Oxygen by Nasal," Lesson 19, pp. 407-414.
36. Students return demonstration in lab: Oxygen by Nasal.

Date _____

37. "Prepare, Administer, Report, & Record Topical Medication," Lesson 20, pp. 415-422.
38. Students return demonstration in lab: Topical Medication.

Date _____

39. Conduct written examination and clinical practicum (see checklist in this section).

STUDENT APPLICATION
MEDICATION TECHNICIAN COURSE

Application Date:	BEST Test Scores: (Math) (Reading)

TO ALL APPLICANTS: Age, racial, and sexual data are important in determining the effectiveness of efforts related to the provision of equal education. However, this information is optional. A copy of Nursing Assistant Card and a 1" X 1" photo is required. This information is not used for admission.

☐ Miss ☐ Mrs. ☐ Mr.	Name: (Last) (First) (Middle) (Maiden)		
Home Address: (Street)	(City)	(State)	(Zip)
Date of Birth:	CNA Certificate No.:	Social Security No. :	Phone No.:
Place of Birth: (City) (State)		Ethnic Origin:	
Status: ☐ Single ☐ Married ☐ Separated ☐ Divorced ☐ Widow			

EDUCATION

High School (Name)	(City)	(State)	No. Years Attended:
Did you graduate? ☐ Yes ☐ No	What year?		
* GED: (Place where test was written)		Date Written:	
College: (Name)	(City)	(State)	
Other education:			

*A minimum of four years of high school or its equivalent is required.

WORK EXPERIENCE

(List work experience for last five years beginning with present position)

Position	Location	Dates From	Dates To

Do you grant permission for us to contact previous employer(s) regarding your work record?
☐ Yes ☐ No

Signature

Dear Applicant:

The next Medication Technician class is scheduled to begin _____ at _____. The class is scheduled from _____ to _____ on the following days: _____.

There will be 8-10 hours of clinical experience when theory is finished. This will be scheduled the week of _____ and will involve two days for each student.

The cost is $_____, which includes the texbook.

Students who have more than one absence will automatically terminate themselves from the course.

The pre-entrance BEST test will be given _____ at _____ at _____.

Please be on time and bring the following items with you on testing day.

1. Identification: Missouri Certified Nurse Assistant Card and one other form of identification.
2. A _____ dollar money order or cashier's check made payable to:

   _____. NO PERSONAL CHECKS OR CASH.

An official transcript must be sent to the school. The transcript must be signed by the principal or registrar, or have the school seal and show the date of graduation.

Plan for four hours of testing. After the pre-entrance test, you will receive a letter with your test scores and information regarding enrollment day and time.

The student qualifications for taking the Medication Technician Training Program are as follows:

1. High school graduate or GED equivalency.
2. Reading comprehension, writing ability, and aptitude for simple mathematics, as determined by the BEST test.
3. Completion of the Missouri state-approved Nurse Assistant in Long-Term Care Training Program.
4. One-year employment as a Nurse Assistant.
4. A letter of recommendation from the administrator, if employment has been less than one year.

If there are further questions, please contact me at _____.

Sincerely,

(Name)
(Title)
(Facility)

Competencies for Medication Technician

Name of Student (Ms., Mrs., Mr.) (Last)		(First)	(Middle)	(Maiden)
Permanent Address (Street)		(City)	(State)	(Zip)
Social Security Number		Training Site		
Date Started	Date Completed		Theory Grade	
Instructor		Examiner		

COMPETENCY	YES	NO
1. Safeguard medication preparation and storage area.		
2. Inventory drugs.		
3. Transcribe written medication orders.		
4. Wash hands.		
5. Maintain aseptic conditions.		
6. Measure vital signs (TPR B/P).		
7. Prepare and administer oral medications.		
8. Prepare and administer rectal medications.		
9. Prepare and administer vaginal medications.		
10. Assemble and administer oxygen per cannula.		
11. Prepare and administer instillations.		
Ear		
Eye		
Nasal		
12. Prepare and administer topical medications.		
13. Report & record information relative to administration of medications.		
14. Requisition and credit medications.		

Agreement Form

Medication Technician Training Program

Form to be completed by the facility and returned to

School _____

Address _____

_____

Name of course _____

Location of course _____

Rate of pay _____

Effective date _____ Closing date _____

Number of weeks _____ Sessions per week _____

Hours per session _____ Total number of hours _____

Financed by _____

Student fees or invoices sent to: _____

_____

_____

_____

Submitted by_____

Date submitted _____

Requirements

Length of Training: Forty hours of theory, plus a minimum of 8 hours of practicum for each student. Beginning and ending dates must be sent to: _____

Location of Training: Your facility.

Instructors: RNs certified for teaching from your facility.

Schedule of Training: A schedule of daily sessions and practice assignments for each student. Mail schedule to:_____.

Instructor Salary: No salary because instructors will be instructing during their regular work shift.

Instructional Supplies and Equipment: To be furnished by your facility.

Individual Student Guides: To be ordered by the facility from:

Instructional Materials Lab
2316 Industrial Drive
University of Missouri-Columbia
Columbia, MO 65202
Phone 1-800-669-2465.

Approximate cost is $_____ plus 10% mailing. Each student must have the textbook *Certified Medication Technician*. Cost of book is subject to change. *Instructor's Manual* is $_____ plus 10% mailing.

Pre-Entrance Testing: The BEST (Basic Essential Skills Test) is to be scheduled one week prior to the beginning of the class.

The BEST test will be administered by a representative of the _____. The fee to take the BEST test is $10.00 per student, made payable to _____. The $10.00 must be paid by money order or cashier's check. Checks will be accepted from the facility.

To be eligible for the course, the applicant must make a 75% score in math and reading.

Your Cost: $ _____ to cover consultant instructional services and record-keeping. This includes the final certification exam by an approved instructor.

Completion of Records by Facility: Upon completion, send the following to _____:

a. Daily attendance card for each student, which will contain the attendance and student record during the period of training.

b. List of students who qualify for certificate.

Certificates will be mailed to you.

Tuition Refund: No tuition refund given after the first day of class.

Student Accounting: At registration, done by the school.

a. Registration card, application, attendance and grade forms.

b. One VED-1 form.

c. Evidence that each student is a high school graduate or equivalent (GED).

d. Student's picture, 1" x 1" face size. Do not cut prior to submitting. Print each student name on an envelope, put picture inside, and seal.

_____ will be available for consultation during the period of instruction.

We are happy to work with you in the operation of this program, and trust this program will be satisfactory.

_____

Signature and Title

SAMPLE MEDICATION CARD

(front)

TRADE NAME
Generic Name

CLASSIFICATION(S): Category B

INDICATIONS

ACTIONS:

CONTRAINDICATIONS AND PRECAUTIONS:

ADVERSE REACTIONS AND PRECAUTIONS:

INTERACTIONS
Drug-Drug and Drug-Food:

ROUTE AND DOSAGE:

NURSING IMPLICATIONS:

(back)

OTHER CONSIDERATIONS FOR A MEDICATION CARD THAT WOULD BE USEFUL TO THE CMT WOULD BE:

PATIENT/FAMILY TEACHING

POTENTIAL NURSING DIAGNOSES:

WHY WAS THIS DRUG PRESCRIBED FOR THIS PATIENT?

Medication Technician Certification Form

We, the undersigned, hereby certify that the students whose names are listed below have completed the course of instruction and have satisfactorily passed the examination to qualify for certification as Medication Technicians.

	Name	Social Security Number	Date of Birth
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

Submitted to the Missouri League of Nursing Home Administrators office this _____ day of _____, 19_____.

Training site _____

Address, City, State, Zip _____

R.N. Examiner _____

R.N. Examiner _____

CERTIFICATE

Issued by the School District of Parenteral, Missouri
Department of Career & Continuing Education

This is to certify that

_____

has satifactorily completed the forty-eight hour state approved medication technician course

_____
Date

_____
Coordinator
Adult Health Occupation Programs

SEAL

THE SCHOOL DISTRICT OF PARENTERAL, MO.

Certificate

Issued by

DEPARTMENT OF CAREER & CONTINUING EDUCATION

THIS IS TO CERTIFY THAT

_____

has completed a _____hour course in

_____

in a satisfactory manner and is therefore entitled to this Certificate.

_____ _____

Date Coordinator, Health Occupations

State Approved Course

for

MEDICATION TECHNICIAN

STUDENT HANDBOOK

_____

School Name

I CERTIFY THAT THE CONTENT AND POLICY ARE TRUE AND CORRECT.

_____

Signature

(Year)

(This handbook is provided as an example.)

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Foreword

The purpose of this handbook is to make available to each trainee an overview of the state-approved training program for Medication Technician provided by the _____(Name of School)_____ in cooperation with the Vocational Division of the State Department of Education, Jefferson City, Missouri.

This information will acquaint the student with the philosophy and purpose of this program. It will permit students to know, in advance, school policies, course arrangement, and scheduling.

Notice of Non-Discrimination

_____(Name of School)_____ is committed to a policy of non-discrimination on the basis of race, age, sex, religion, color, national origin, creed, handicap, or marital or parental status. This policy is in effect for admissions, educational programs, activities, and regulations, as specified by Federal and state laws and regulations. Preference will be given veterans who meet the criteria of the program.

General Statement

You are now a student in the ____(Name of School)_____ state approved training program for Medication Technician. This program, as all other public education, is operated on a not-for-profit basis.

Philosophy

It is the right of every individual to receive optimum health care delivered by trained personnel. Federal and state laws and regulations are adopted to insure quality care to residents of health care facilities. The Medication Technician acquires special knowledge, skills, and techniques in drug administration. The patient's welfare is the legal and personal responsibility of the Medication Technician as well as the other members of the long-term health care team.

Objectives

Upon completion of this course, the Medication Technician will be able to:

1. Prepare, administer, and chart medications by all routes except those given by the parenteral route.
2. Observe, evaluate, report, and record response of residents to medications given.
3. Identify responsibilities associated with control and storage of medications.
4. Identify appropriate reference materials.
5. Know side effects, interactions, admixtures, and nursing implications of common medications.
6. Identify lines of authority and areas of responsibilities.

Student Qualifications

1. High school graduate or equivalent (GED).
2. Score 75% in each category of the BEST Test (reading comprehension and mathematics).
3. Preferably one year of experience as a Nurse Assistant or Certified Nurse Aide. If less than one year, a recommendation of health care agency is due on the day of enrollment.
4. May or may not be currently employed in a long-term care facility.

Tuition

Tuition	$_____	Registration Fee	$_____
Pre-Entrance Testing	$_____	Certification Fee	$_____
Textbook	$_____		

Tuition Refund Policy

1. The tuition cost of $_____ is non-refundable after the starting date of class, as the program must depend upon full enrollment to meet the costs of program operation.

If the student terminates, the certification fee of $_____ will be refunded.

2. Should the student withdraw between enrollment date and the starting date of the class and a satisfactory replacement can be found prior to the start of the class, a total of $____ will be refunded **if paid in advance**. The (Name of School) Admissions Committee is solely responsible for determining the eligibility of a replacement student.

Holidays

Classes falling on a school holiday will be rescheduled.

Educational Program

1. The program constitutes a minimum of 40 hours of classroom laboratory instruction. Hours are planned in advance of starting date of class.
2. A minimum of 8-10 hours of clinical practice will be given each participant under the supervision of the instructor, plus a minimum two-hour practicum examination.
3. Hours of clinical practice may vary with each student.
4. Evaluation includes a minimum of three written tests and classroom and clinical practice based on course objectives. Students must have an average of 85% on the written test to be eligible for the final examination.
5. The final examination includes a written examination of 50 questions and a score of 85% is required for passing.

Units of Instruction

Medication Technician
General Principles in Drug Administration
Preparation Administration
Reporting and Recording Practicum

Examination and Grading Policies

Students shall achieve an average of 85% overall on three written examinations to be eligible for the final examination. A score of 85% is required for passing. The final examination, if not successfully passed, may be retaken one time without repeating the course.

The student is expected to contact the instructor for a written make-up test schedule. A copy will be given to the student and a copy will be kept in the student's file.

Dismissal From the Course

The instructor may recommend the dismissal of any student whose health, personal hygiene, conduct, scholastic standing, or lack of aptitude for Medication Technician make

it inadvisable for the student to continue in the course.

Conduct for which students may be disciplined or terminated includes, but is not limited to:

1. Insubordination;
2. Abuse of drugs and/or alcohol;
3. Leaving school premises without instructor knowledge and/or permission, while assigned to classroom or clinical practice; or
4. Inconsistent adherence to written school policies.

Transcripts

Copy of the final transcript or other school record forms will be forwarded to any employer, college, or school upon written request of the individual who successfully completes the course and makes payment of $_____ per copy. The original transcript remains the property of the _____(Name of School)_____. To have a transcript sent, send a letter of request and $_____ to: (School Name and Address).

Completion of Course

A certificate will be awarded to the student who successfully completes the course. Final records will be kept in the ____(Name of School)_____ office.

Attendance

1. There will be only one theory absence allowed during the course. This one absence must be made up at a time convenient to the instructor. There are **no** clinical absences allowed.
2. It is expected that the student will be on time for **all** classes.
3. Students **must** call____(Telephone Number)____ when illness or emergency needs require an absence from class.

Student Welfare and General Policies

1. Students may not smoke in the classroom — only in designated areas of the building where smoking is allowed.
2. To maintain a professional relationship, students should be called by their last names, i.e., Miss Smith.

Uniform Standards

1. Students are responsible for obtaining their own white uniforms, white hose, white shoes, and a watch with a second hand.
2. The uniform shall be clean, wrinkle-free, and in good repair.
3. Dress uniforms will be no shorter than mid-knee. Students may wear pant uniforms.

4. Students shall wear a name pin on left front of the uniform.
5. Plain white hose will be worn with the uniform (pant or dress). White bobby socks and knee-highs are not acceptable. Men must have plain white socks; colored bands at the top are not acceptable.
6. White nurses' shoes will be worn with the uniform. These must be polished and have clean shoe strings. The shoes must be in good repair.
7. Students may wear street clothes to theory classes. Shorts, halters, midriff tops, overalls, jeans, mini-skirts, among other fad items, are not acceptable.
8. White undergarments for both men and women are required.
9. Jewelry:
   a. Wedding and engagement rings **only** may be worn with uniforms. No rings with large stones may be worn.
   b. Inconspicuous pinhead-sized earrings may be worn by students with pierced ears.
   c. **No other jewelry** except the nurse's watch is to be worn with the student uniform.
10. Nails must be kept clean and short. No chipped nail polish.
11. All students' hair must be kept off the collar when in uniform. Hair adornments are not to be worn when in uniform. Hair must be off the face. Bangs touching the eyebrows and long dangling side curls are unacceptable.
12. Beards and mustaches must be neatly trimmed. Daily shaving is an essential part of grooming.

Classroom Rules

1. Be on time.
2. No personal phone calls will be accepted.
3. No smoking, eating, or drinking in the classroom.
4. No alcoholic beverages or illegal drugs are allowed on the premises.
5. Tests should be written in pencil.
6. Cheating is not allowed.
7. Assignments shall be completed and handed in on standard-size (8 1/2 x 11) lined paper, written in blue/black ink or typewritten and double-spaced.
8. Students shall hand in assignments on time. Instructors shall provide specific deadlines.
9. Notebooks and other writing materials are provided by the student.
10. Children, relatives, friends, or employees are not permitted to be in attendance during school hours.

STATEMENT

My signature, as affixed below, certifies that:

1. I have read and understood the contents of the Medication Technician Student Handbook.

2. I understand that only one absence is allowed during the Medication Technician Course, and if I have more than one absence, I will automatically terminate myself from the Medication Technician course.

_____ _____

Signature Date

Complete the following:

Agency or Facility Name _____

Address _____

Phone Number _____

Name of Contact Person at Agency or Facility _____

✣ Level I Medication Aide Training Program

"In any facility choosing to actually administer medication, personnel doing so must either be a physician, licensed nurse, certified medication technician or ***Level I Medication Aide.***"

With this revision of the rules and regulations stemming from the Omnibus Nursing Home Act of 1979, the state of Missouri created a mandate for Level I Medication Aide training.

To address it, the Division of Aging; the Missouri Department of Elementary and Secondary Education, Health Occupations; the University of Missouri-Columbia; and the Missouri Residential Care Association joined forces to develop a curriculum for the Level I Medication Aide Training Program.

This section deals with the instruction of this curriculum.

What's inside:

Page

- An overview of the course including necessary student and instructor qualifications 5.1
- A checklist for implementing the course and teaching Lesson Plans session by session 5.5
- A detailed outline of teaching Lesson Plans 5.9
- Sample forms often used with this course ..... Back of this section

In addition, you will find the state regulations pertaining to the Level I Medication Aide Training Program in Section 7.

An Overview of the Level I Medication Aide Training Program

The Level I Medication Aide Training Program is an independent self-study course with eight hours of integrated formal instruction. It is designed to train anyone involved with the administration or distribution of medication in Residential Care I or II Facilities (see definitions on page 7.2), including proprietors and administrators.

The course encompasses the techniques of administering and distributing drugs, awareness of drug interaction and side effects, control and storage of drugs, using appropriate drug references, legalities of administration as they relate to resident rights, and a discussion of understanding the needs of the elderly.

The course is based on the *Level I Medication Aide* textbook, which uses the Lesson Plan format (see the Lesson Plan discussion, page 2.7, for information on this concept). See Resources section, page 8.3, for ordering the textbook or contact:

Instructional Materials Laboratory
2316 Industrial Dr.
Columbia, MO 64202
1-800-669-2465 (Toll Free)

Course of Study

Upon completing this course, the Level I Medication Aide will be able to:

1. Define the role of Level I Medication Aide.
2. Identify the purposes of commonly used drugs.
3. Identify side effects and interactions of commonly used medications.
4. Prepare, administer/distribute, and record medications.
5. Observe and report unusual responses to medications (this requires periodic review).
6. Identify responsibilities associated with control and storage of medications.
7. Use appropriate drug reference materials.

At the completion of the practicum, the students will have achieved the following competencies:

1. Wash hands.
2. Measure vital signs: TPR.
3. Measure vital sign: blood pressure (BP).
4. Prepare and administer instillations: ear, eye, nasal.
5. Prepare and administer vaginal medications.
6. Prepare and administer rectal medications.

7. Safeguard medication preparation and storage area.
8. Maintain cleanliness in medication preparation and administration.
9. Report and record information relative to administration of medications.
10. Prepare and administer topical applications.
11. Prepare and administer oral medications.
12. Transcribe written medication orders.

Student Qualifications

A student shall not administer medications without the instructor present until he or she successfully completes the course and obtains a certificate.

The qualifications for the Level I Medication Aide course are simple: Anyone at least 16 years old employable in a Residential Care Facility I or II to be involved in direct resident care shall be eligible to enroll as a student or to challenge the final examination.

Challenging the Examination

The following individuals may "challenge" (bypass the course and qualify as Level I Medication Aides by passing the final examination):

- Individuals either enrolled in or who have been enrolled in a professional nursing school or in a practical nursing program, who have completed the medication administration or pharmacology course, and who have letters of endorsement from the directors of their respective programs.
- Individuals who provide evidence of successful completion of a state-approved Medication Technician Training Program while working as a psychiatric aide at a Missouri state school or individuals already trained in medication administration while employed in a facility licensed by the Missouri Department of Mental Health, prior to September 30, 1985.
- Individuals approved by a long-term care association, according to the following criteria:
    1. Employed in a long-term care facility for at least three years, or
    2. Currently employed as the administrator or manager of a long-term care facility.
    3. Proficient in measuring vital signs (TPR and blood pressure).
    4. Able to demonstrate reading, writing, and self-study skills.

Those persons wanting to challenge the final examination shall submit application documentation, in writing, to an approved long-term care association — the Missouri Residential Care Association, (see address on page 5.4) or the Missouri Health Care Association (see address on page 3.14). If approved to challenge, the association will send a letter to the

student that can be presented to an approved instructor to make arrangements for testing.

Sponsoring Agencies

The Level I Medication Aide Training Program may be sponsored by an area vocational-technical school, a comprehensive high school, a community/junior college, a college or university approved by the Department of Elementary and Secondary Education, a currently licensed Residential Care Facility I or II, or a long-term care association.

The sponsoring agency is responsible for:

- Obtaining an approved instructor (see below).
- Determining the number of manuals needed for a given program and ordering them (see order form under Resources in this manual).
- Presenting a class schedule and date and location of final examination along with student information (see forms in the back of this section) for approval by an approved long-term care association.
- Notifying that long-term care association in advance of any changes in dates or locations.

Classrooms used for training shall contain sufficient space, equipment, and teaching aids to meet the course objectives as determined by an approved long-term care association. For general classroom suggestions, see page 2.3 of this manual.

Suggested equipment includes:

- Teaching stethoscope.
- Blood pressure apparatus.
- Demonstration drug samples.
- Overhead projector.
- Projection screen.
- Graduated measuring devices.

See the Resources section of this book for companies that can supply this equipment.

If the instructor is not directly employed by the agency, there must be a signed written agreement between the sponsoring agency and the instructor which shall specify the role, responsibilities, and liabilities of each party.

An Approved Instructor

The instructor for the Level I Medication Aide Training Program must be endorsed by an approved long-term care association. To gain approval, the following information is required:

- Copy of RN or LPN license.
- Copy of Social Security card.

- LPN's transcript from a school with an accredited program and which shows study of pharmacology. Note: "waiver nurses" do not meet requirements.
- A summation of work experience, which should include at least one year in long-term care within the past five years or current employment in long-term care for the past six months, or current employment in a health occupations education program.

All of the above is sent to the following:

Executive Director
Missouri Residential Care Association
227 E. Capitol
Jefferson City, MO 65101

Supervisor, Health Occupations Education
Department of Elementary & Secondary Education
Box 480
Jefferson City, MO 65102

Missouri Health Care Association
236 Metro Drive
Jefferson City, MO 65109

Checklist for Level 1 Medication Aide Workshop

Use this checklist **after** the course has been set up, the students have been recruited; notified of where and when the pre-course session will be held; textbooks have been ordered; equipment acquired; and grade and attendance book set up. See page 2.19 of this manual for instructions on setting up a course.

Implement the Course

- ☐ Obtain program approval by submitting present projected program class schedule, testing date, **and** a class roster (see forms at the back of this section) to Level I Medication Aide, Missouri Residential Care Association or the Missouri Health Care Association.
- ☐ Exam books will be sent to you prior to the testing date. Check if you want booklet A, B, or C. They all cover the same material, but in different fashions. If you're retesting, and used A for the initial test, order B or C. Do not let these test booklets out of your possession. Answer sheets accompany them.
- ☐ Notify the Missouri Residential Care Association or the Missouri Health Care Association in advance of any date or time changes.

Session I (Pre-course Meeting)

- ☐ Complete enrollment forms and cards.
- ☐ If Voc-Tech facility, complete VED forms.
- ☐ Collect tuition and give receipt.
- ☐ Make a file for each student.
- ☐ Hand out textbook, *Level I Medication Aide*.
- ☐ Give a course overview. Explain the self-study concept, home assignments, and the two three-hour and one two-hour classroom sessions.
- ☐ Explain requirements for passing (80% on the written test, 100% on the practicum) and retesting limits (one time within 90 days).
- ☐ Discuss the written final examination, what it covers as far as class and self-study material.
- ☐ Discuss practicum examination—student will perform preparation and administration of medications according to the steps of the procedure, either in the classroom or in the actual facility.

- ☐ Review instructional analysis. This allows the student to understand the nature of the course and allows you to evaluate the class level.
- ☐ Establish a class schedule. Suggest class sessions every other week to allow for home assignments and comprehension of class content. You may wish to ask for input from students for scheduling.
- ☐ Establish a testing date now to give time for organization and reduce student stress.
- ☐ Divide class to limit class size, if necessary. A ratio of one instructor to 10 students is good. You can stagger classes.
- ☐ Assess competencies. Evaluate individual techniques for measuring blood pressure and measuring vital signs (temperature, pulse, respiration).
- ☐ Prepare competency check sheets (see form at the back of this section).
- ☐ Establish an extra class period for those who cannot meet competency check sheet and teach Lessons 4, 5, 6.
- ☐ Make initial assignment—read course of study and read Unit I, "Introduction."
- ☐ Hand out release-of-information form to allow release of course results to residential care facility (see form at back of Teaching Strategies section in this manual).

Session II

See detailed outline of Lesson Plans on the following pages.

- ☐ Review—preface, course of study and philosophy.
- ☐ Lesson Plans 1, 2, 3, 4, 5, 6.
- ☐ Cover Handouts 1-3, 2-6, 2-7, 3-9
- ☐ Assignments:
  - Evaluation items due at the next session for Lessons 1-6.
  - Read Lessons 7, 8, 9, 10, 11 and complete evaluation items.
  - Report on basic human needs and relationships.
  - Study drug classification handout, 3-9.
  - Compile file of the drugs used in your facility.

Session III

See detailed outline of Lesson Plans on the following pages.

- ☐ Review Lesson Plan 7, 8, 9, 10, 11.
- ☐ Cover Handouts 7-1-5 through 7-20 briefly.

- ☐ Demonstrate Lesson Plan 8.
- ☐ Assignments:
  - Activities, p. 141 (optional), 187, 163.
  - Evaluation items.
  - Handouts 7-15 through 7-20, 8-21 through 8-24, 9-25 through 9-31.
- ☐ Practice recording and reporting from Lesson Plan 9.
- ☐ Review for written test.

Session IV (Testing)

- ☐ Give written test and supervise practicum.

Written Test

Students must receive 80% to pass the written examination.

Each form of the written test contains 25 questions, a combination of true-and-false and multiple-choice.

A section of the test refers to the classification of drugs. Students will be allowed to use the Drug Classification Handout 2-7, pages 41-70 of their textbooks, while taking the test. Students must have access to reference material prior to the testing period.

- ☐ Let your students know there is a procedure for retesting. They may repeat the examination if the instructor requests an alternate test booklet. They can repeat the exam only one time and within 90 days. You may need to assign additional work to assist the student in weak areas.

  See guidelines for challenging the examination in the Overview part of this section.

- ☐ Grade the test with the answer grids that accompany the test booklets.

Practicum

The student must pass the practicum part of the examination by a score of 100%. Students should be instructed to study the performance check sheet prior to coming to the session.

- ☐ Prepare a simulated medication set-up or a controlled session within the facility.
- ☐ Students will prepare a set-up of 10 selected medications for oral administration according to the steps of the procedures.
- ☐ Follow the performance and check off each successful completion.
- ☐ A pencil and paper evaluation will assess the student's understat-

ing of the administration of vaginal and rectal medications.

- ☐ Administering eye drops may be assessed with a check sheet and using artificial tears (student's option), or a pencil/paper assessment may be made.
- ☐ Sign the performance check sheet if the student's ability is satisfactory. If not, schedule additional class time and reschedule practicum. Or reschedule practicum without class time if you feel the unsatisfactory performance was due to student stress.

After Testing

- ☐ Prepare a final score sheet for each student. Retain the original in the student's file and give copies to:
  - Student
  - Residential care facility, if employed.
  - The Missouri Residential Care Association or the Missouri Health Care Association.
- ☐ For students that pass the test, send the following information to the Missouri Residential Care Association or the Missouri Health Care Association:
  - Cover letter.
  - Examination booklets.
  - Answer grids.
  - Copy of score sheet.
  - Class roster with attendance.
  - Certification fee for each student ($10) for card, certificate, and pin (send check from school or facility, or money order from student), payable to the Missouri Residential Care Association or to the Missouri Health Care Association..
- ☐ In addition, submit names of successful students to the appropriate association previously listed and to:

  Supervisor, Health Occupations Education
  Department of Elementary and Secondary Education
  Box 480
  Jefferson City, MO 65102

  Department of Mental Health, if applicable.
- ☐ Set date for retest if necessary. Can retest one time within 90 days.
- ☐ Order retest booklet (ask for booklet letter different from original test booklet).

Sample Lesson Plan Outline for Level I Medication Aide Training Program

Here is a detailed outline for teaching the Lesson Plans of the Level I Medication Aide Training Program.

Following this outline will allow you to cover the minimum information required to pass the course. However, it may take you longer than eight hours to accomplish this curriculum. You will have to try it out and see how you can best serve your students' needs. You will, of course, make each course unique according to your own style and presentation.

This outline starts with Session II. It follows the pre-course session in which Unit I was assigned and competencies were checked according to Lessons 4, 5, and 6.

Session II

1. Instructor should review preface, course of study, and philosophy in the classroom.
2. Lesson Plan 1 - "Introduction."
   a. Scope of unit.
      1) Teacher centered.
      2) Provides student information.
   b. Objectives.
      1) Student centered.
      2) Provides basis for testing.
   c. Introduction.
      1) Prepares for learning.
      2) Sets the stage.
      3) Gets communication on equal basis.
   d. Content.
      1) Goals.
      2) Objectives.
      3) Teaching strategies.
      4) Student responsibilities.
      5) Role of Level I Medication Aide.
   e. Summary and conclusion.
      1) Always read to class.
      2) Ties it together.
      3) Sets the stage for the next lesson.
   f. Assignments.
      1) Activities optional.
      2) Evaluation items to be brought in at next session.

3. Overview of "Basic Human Needs, Relationships." H.O.1-3, pp. 15-17.
   a. Will stimulate a lot of classroom discussion—watch your time allotment.
   b. Make assignment for outside of class.
      1) Student reports.
      2) Group discussion.
   c. Try to allot some time before beginning the next classroom session for remarks.

4. Lesson Plan 2 - "Classification and Implications of Commonly-Used Drugs"
   a. Scope of unit.
   b. Objectives.
   c. Introduction.
   d. Outline content.
      1) Terms.
      2) Drug classification.
         a) Just cover outline material, not H.O.
         b) Emphasize these are common uses—they could be prescribed for other symptoms. NEVER double dose.
         c) Assign H.O.s 2-6 and 2-7, pp. 39-70, for self-study.
      3) Observation of drug reaction.
      4) Medications taken most frequently.
      5) Drugs that cause life-threatening reactions.
         a) Emphasize this.
         b) There will be test questions on this.
   e. Summary.
   f. Assignment. Compile file of the drugs used in your residential care facility.

5. Lesson Plan 3 -" Physical Changes Due to Drug Reactions" p. 71.
   a. May open with class discussion from Lesson 2.
   b. Scope of unit.
   c. Objectives.
      1) Students will be tested on objectives.
      2) May not be stated exactly the same.
   d. Introduction, p. 72.
   e. Outline content.
      1) Major problems, p. 73.
      2) Techniques of observation.
         a) Explain how the senses are utilized.
         b) Assign students Review Lessons 4, 5, and 6.
      3) Cover "Observations to Report" briefly. H.O. 3-9, pp. 85-87.
   f. Summary and conclusion.

g. Assignments.
   1) Activities will help during the final exam.
   2) Evaluation items.
   3) Handout materials are assigned.

6. Lesson Plans 4, 5, and 6 - "Vital Signs" and "Hand Washing."
   a. Read Scope of Unit III.
   b. Hopefully these were assessed during pre-session.
   c. Competencies should have been filled out.
   d. Teach these lessons if the entire class could not assess vital signs and B/P.

Session III

1. Lesson Plan 7 - "Basic Guidelines," p. 133.
   a. Read Scope of Unit IV.
   b. Objectives.
   c. Introduction.
      1) These are the rules and principles.
      2) Covers the do's and don'ts.
   d. Outline content.
      1) This is not the procedure.
      2) Explains the rationale with the principle.
         a) Explain the why's of the Seven Rights.
         b) Be sure you can answer the questions.
      3) Explain and emphasize the Seven Rights, p. 137.
      4) Encourage using this lesson in present facility.
      5) Cover the H.O.s 7-15 through 7-20 briefly, pp. 145-155.
   e. Summary and conclusion.
      1) This lesson and the following need to be presented in the same session.
      2) Re-emphasize any warnings, i.e.: Level I Medication Aide is responsible for resident safety after administration of medications.
   f. Assignments.
      1) Activity optional, p. 141.
      2) Evaluation items non-optional, p. 143.
      3) Assign H.O. materials, pp. 145-155.
2. Lesson Plan 8 - "Prepare and Administer Meds," p. 157.
   a. Objectives.
      1) Indicate this is a procedure.
      2) Indicate these are the steps they must follow on practicum.
   b. Introduction, p. 158.
   c. Steps of procedure, p. 159.
      1) May walk through the procedure verbally before demonstrating.

2) Demonstrate the steps exactly.
   a) No interaction items.
   b) No extra information until after lesson.
3) Be sure you follow the steps exactly, because this is the student's practicum.
4) This lesson is set up in two stages.
   a) Steps of preparation.
   b) Steps of administration.
   c) Each stage has a summary—be sure to read before going to next stage.
5) Interaction items can be included after the steps of procedure have been completed.
6) Activities.
   a) Allow students to practice steps of procedure after lesson.
   b) Be sure they practice in the same sequence as the lesson.
   c) Encourage them to follow the competency check sheet.
   d) Students must show competency with handout materials by completing a pencil/paper test during practicum.

Assign H.O.s 8-21 through 8-24, pp. 171-178, evaluation items, 165-169.

3. Lesson Plan 9 - "Recording/Reporting Administration of Drugs"
   a. Objectives, p. 179.
   b. Introduction, p. 180.
   c. Outline content, p. 181.
      1) Purpose.
      2) Legal document.
      3) Legal responsibilities, p. 182.
      4) Information on a medication sheet, p. 183.
      5) Information on a prescription label, p. 184.
      6) Medication errors, pp. 184-185.
   d. Summary.
   e. Interaction should be included in outline content, p. 187.
   f. Activities, p. 187.
      1) Will reinforce learning.
      2) Could have students record from the physician's order sheet to a blank worksheet. H.O.s 9-25 through 9-31, pp. 191-203.
      3) Could use the completed worksheets for examples.
      4) Make an assignment to work through these materials.
      5) Can put activity with previous lesson for continuity.
   g. Evaluation items should be assigned for home.
4. Lesson Plan 10 - "Methods of Medication Storage and Control," p. 205.

a. Read Scope of Unit V.
b. This can be a self-study lesson.
c. Read objectives.
d. Read introduction.
e. Some can work on this lesson while others are practicing the lab activity.
f. Remind them this is on the final exam.
g. Make assignments. H.O.s 10-32 and 10-33, pp. 217-220; evaluation items, p. 215.

5. Lesson Plan 11 - "Drug Reference Material," p. 221.
   a. Read Scope of Unit VI.
   b. Read objectives.
   c. Read introduction.
   d. Assessing self-study.
   e. Fill out test evaluation items on p. 229.

Session IV

Give written test and supervise practicum. See page 5.7 of this manual.

LEVEL I MEDICATION AIDE
Pre-Class Registration Approval Form

Instructor:	Office Use Only
Location:	
Address:	
Telephone:	

Projected Class Dates:

_____, 19___ _____ to _____

_____, 19___ _____ to _____

_____, 19___ _____ to _____

_____, 19___ _____ to _____

Final Examination _____, 19___ _____ to _____

Total Tests Needed:	Test: A ____ B ____ C ____

Signature_____
(Name and Title)

Include a class roster and mail this form to:

Executive Director
Missouri Residential Care Association
227 East Capitol Avenue
Jefferson City, MO 65101

Level I Medication Aid
Final Class Roster

Instructor	Location	Address
Class Date _____ ,19 _____ , 19 _____ , 19	Final Examination _____ , 19	

Name and Employer	Social Security #	Address (City, State, Zip)	Phone #	Age	Attendance Dates			
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								

SAMPLE SCORE SHEET AND COMPETENCIES FOR LEVEL I MEDICATION AIDE

Name: (Ms., Mrs., Mr.)		Location: (Sponsoring Facility)	
Address: (Street)	(City)	(State)	(Zip)
Date started:		Date completed:	
Final examination form: *circle one* A. B. C.	Score: *written test* %	Social Security #:	

COMPETENCIES

Competencies Demonstrated According to Steps of Procedure	YES	NO	Competencies in Oral Exam (Examples)	YES	NO
Wash Hands			1. Digoxim 0.25 mg. PO		
Measure Vital Signs (T,P,R)			2. Nitroglycerine 0.4 mg. Subl		
Measure Blood Pressure			3. Elix. Terpin Hydrate with Codine 5 ml. PO		
Prepare and Administer Eye Drops			4. Neo-Synephrine spray 0.25% sol. each nostril. Nasal spray		
Competencies Evaluated in the Written Final Examination			5. Diabenase bid 250 mg. PO		
Prepare and Administer Vaginal/ Rectal Medications			6. Kaon Elix. 15 ml. in H_2O PO		
Safeguard Preparation and Storage Area			7. Neo-Cortaf (opth) ointment 0.59% each eye		
Maintain Cleanliness in Medication Preparation and Administration			8. Dulcolax Tab T 5 mg. PO		
Report and Record Information Relative to Admin. of Medication			9. Lasix 40 mg. PO		
NOTE: **Preparation and Administration of Medication Requires 100% Accuracy**			10. Ear drops 3 drops each ear		

_____
Instructor Signature

_____
Administrator/Owner/Operator/Director of Voc-Tech School

APPROVED _____

NOT APPROVED _____

(Use back of sheet for comments)

✤ Insulin Administration Training Program

Insulin administration has become a crucial part of the care given at long-term care facilities. The number of insulin-dependent elderly diabetics is increasing dramatically.

To assure quality insulin care, the Insulin Administration Training Program was developed in 1982 by the Missouri Department of Elementary and Secondary Education. This programs trains Certified Medication Technicians (CMTs) to administer insulin in **skilled and intermediate care facilities**.

In **residential care facilities**, however, this program has not been mandatory—even nonlicensed personnel who were trained by a licensed nurse or physician could administer insulin.

Until now. Recognizing the need for formal training and minimum standards for anyone who administers insulin in residential care facilties, the Division of Aging, along with the Missouri Residential Care Association, changed Missouri regulations.

Any person who administers insulin in a residential care facility must be either a Level I Medication Aide or a Certified Medication Technician and must have successfully completed or tested out of an insulin administration course. Instructor qualifications have been strengthened as well.

What's inside:

Page

- An overview of the course including necessary student and instructor qualifications 6.1
- A checklist for implementing the course 6.5

In addition, you will find the Missouri regulations pertaining to the Insulin Administration Training Program in Section 7.

An Overview of the Insulin Administration Training Program

The purpose of the Insulin Administration Training Program is to prepare Medication Technicians in a skilled or intermediate care facility or Level I Medication Aides in a residential care facility I or II to administer insulin. The program also presents information on diabetes and implications of proper or improper treatment.

The Course

The course consists of a minimum of four hours of classroom instruction and includes a final written and practicum examination.

The curriculum content includes procedures and instruction in the following areas: diabetes and its treatment and complications; types of insulin; technique of insulin administration; and methods of monitoring blood sugar levels.

The course is based on the *Insulin Administration* textbook which uses the Lesson Plan format (see page 2.7 for information on this concept). There are both student and instructor versions of this text. The texts are ordered from:

Instructional Materials Laboratory
2316 Industrial Dr.
Columbia, MO 64202
1-800-669-2465 (Toll Free)

The instructor should remove from the *Student Manual* the evaluation items and final written examination (pink sheets) prior to the start of the Insulin Administration Training Program and prior to giving the students their instructional manuals.

NOTE: Students are not allowed to administer insulin without the instructor present until they have successfully completed the program.

Student Qualifications

Any Level I Medication Aide or Certified Medication Technician working in a long-term care facility, who is recommended in writing for training by an administrator, manager, or director of nursing with whom he or she has worked, shall be eligible to enroll as a student in this course.

The letter of recommendation is given to the training agency or instructor at enrollment.

Challenging the Exam

Any Certified Medication Technician or Level I Medication Aide, or other person who was trained prior to December 31, 1990, to administer insulin in a residential care facility by a licensed nurse or physician not using the state approved course, must have completed challenging the final examination by April 1, 1991.

Any Certified Medication Technician or Level I Medication Aide who took the **state-approved Insulin Administration Course** taught by a licensed nurse prior to December 31, 1990, is eligible to receive a certificate without retaking the course or challenging the final examination. The individual sends documentation of training to a certifying agency.

Instructor Qualifications

To qualify to teach the Insulin Administration Training Program, an instructor must:

- Currently be an RN licensed in Missouri *and*
- An RN who is currently approved as an instructor for the Level I Medication Aide Training Program *or* Medication Technician Training Program.

Sponsoring Educational Agency

The Division of Aging shall maintain a list of approved certifying agencies to issue certificates for the Insulin Administration Training Program. In order for an agency to be approved, it must enter into an agreement of cooperation with the Division of Aging which shall be renewable annually. The agency must:

- Review all documents submitted by the instructor to assure that the instructor is qualified in accordance with Missouri regulations (see page 7.31).
- Assure all program requirements have been met as set forth in these regulations or as stipulated in the agreement with the Division of Aging.
- Issue certificates to individuals who successfully complete the course or who successfully challenge the course or who present documentation of eligibility as referenced in Missouri regulations.
- On at least a monthly basis, provide the Division of Aging with the names of those receiving certificates.
- Maintain accurate and complete records for a period of at least two years.

Suggested equipment, in addition to instructor and student guides and reference books, include:

- Audiovisual materials and equipment.
- Medication trays.
- Examples of each type insulin.
- Insulin syringe.
- Alcohol/antiseptic sponges.
- Insulin (normal saline vials for classroom demonstration).
- Medicine card.

Testing

The final examination shall consist of a written and practicum examination administered by an approved instructor or examiner.

- The written examination shall include 10 questions taken from the list in the *Instructor's Manual*.
- The practicum examination shall include the preparation, administration, and recording of administration of insulin to a resident(s) under the direct supervision of the instructor/examiner.

To pass, a score of 80% is required in the final written examination and 100% accuracy in the performance of the steps of procedure in the practicum examination.

The final examination, if not successfully passed, may be retaken one time within 30 days without repeating the course.

Those challenging the final examination shall complete the course if the examination is not passed.

Checklist for Insulin Administration Training Program

Use this checklist **after** the course has been set up, the students have been recruited; textbooks have been ordered; and equipment acquired.

- ☐ Enter into an agreement of cooperation with the Division of Aging (must be renewed annually).
- ☐ If class is being offered by a vocational school or community college, send to the Department of Elementary and Secondary Education:
  - Complete VE-1 short form.
  - Copy of instructor's nursing school transcripts.
  - Copy of instructor's certificate from a Medication Technician or Level 1 Medication Aide workshop.
- ☐ Check applicant's files for Level I Medication Aide certification, or letters of recommendation from administrator, manager, nurse, or director of nursing.
- ☐ Set up class schedule.
- ☐ Notify applicants of date, time, and location of class.
- ☐ Set up attendance and grade record book.
- ☐ Remove from *Student Manual* the evaluation items and final written examination (pink sheets) prior to handing the manual to students.
- ☐ Prepare and schedule final examination.
- ☐ Teach the course.
- ☐ Give final and practicum examination.
- ☐ Complete final record and distribute copies as follows:
  1. Maintain a copy in the instructor's or school file for at least two years.
  2 Send a copy to a certifying agency.
  3. Send the original to each individual who completes the course or successfully challenges the final practicum examination.

Final Record
Competencies for Giving Insulin

Name of Student (Ms., Mrs., Mr.)			Maiden	
Address (Street)	(City)	(State)	(Zip)	Social Security No.
Certified Medical Technician		Level I Medication Aide		
Sponsoring Faculty				
Date Course Started	Date Completed	Recommended by		
Written Score	Practicum Score	Challenge exam ☐ Yes ☐ No		

Did the student:	YES	NO
1. Wash hands thoroughly.		
2. Assemble equipment.		
3. Check insulin bottle for expiration date and against medicine card.		
4. Roll insulin vial in palms of hands to mix.		
5. Wipe top of vial with alcohol/antiseptic sponge.		
6. Pull air into syringe equal to amount of insulin to be given.		
7. Insert needle into top of vial and inject air into vial.		
8. Upend vial and syringe and withdraw insulin into syringe.		
9. Remove needle from vial when accurate dose of insulin has been obtained.		
10. Cap needle and place filled syringe with medicine card.		
11. Check insulin bottle against medicine card to be sure correct type of insulin and correct dosage have been obtained.		
12. Have another licensed person check dosage and bottle if another person is available.		
13. Return insulin bottle to storage area and clean up work area.		
14. Place syringe on tray along with an alcohol/antiseptic sponge and the medicine card.		
15. Take tray to bedside.		
16. Identify resident by checking name band and asking resident to state name.		

✣ Rules and Regulations

The Training Programs outlined in this book are set up to comply with Missouri rules and regulations governing them.

The following pages provide excerpts from the Omnibus Nursing Home Act of 1979 which may be of value to instructors of the training programs in this manual. The Act is a lengthy document that details licensing and record-keeping requirements for facilities and penalties for violation of residents' rights. Also included are reprints of those parts of the Long-Term Care Facility Regulations and Licensure Law that apply to these programs.

You may wish to refer to these from time to time to determine what the law has to say about the courses you are teaching.

To obtain a complete document of the Act and all rules, contact the Division of Aging, P.O. Box 1337, Jefferson City, Missouri, 65102-1337. Phone (314) 751-3082.

What's inside:

Inside this section you will find: Page

- Excerpts from the Omnibus Nursing Home Act 7.1
- Reprint of the Table of Contents of the Long-Term Care Facility Regulations and Licensure Law 7.7
- Reprint of Nurse Assistant Training Program rules and regulations 7.9
- Reprint of Medication Technician Training Program rules and regulations 7.19
- Reprint of Level 1 Medication Aide Training Program rules and regulations 7.25
- Reprint of Insulin Administration Training Program rules and regulations 7.31
- Definitions of terms 7.35

Excerpts from the Omnibus Nursing Home Act

198.003. Citation of law.—Sections 198.003 to 198.186 shall be known and may be cited as the **"Omnibus Nursing Home Act."**

(L. 1979, S.B. 328, 432, 35 & 419 § 2)

198.006. Definitions.—As used in sections 198.003 to 198.186, unless the context clearly indicates otherwise, the following terms mean:

(1) **Abuse**, the infliction of physical, sexual, or emotional injury or harm;

(2) **Administrator**, the person who is in general administrative charge of a facility;

(3) **Affiliate**:
(a) With respect to a partnership, each partner thereof;
(b) With respect to a limited partnership, the general partner and each limited partner with an interest of five percent or more in the limited partnership;
(c) With respect to a corporation, each person who owns, holds, or has the power to vote five percent or more of any class of securities issued by the corporation, and each officer and director;
(d) With respect to a natural person, any parent, child, sibling, or spouse of that person;

(4) **Department**, the Missouri department of social services;

(5) **Emergency**, a situation, physical condition, or one or more practices, methods, or operations which presents imminent danger of death or serious physical or mental harm to residents of a facility;

(6) **Facility**, any residential care facility I, residential care facility II, intermediate care facility, or skilled nursing facility;

(7) **Health care provider**, any person providing health care services or goods to residents and who receives funds in payment for such goods or services under Medicaid;

(8) **Intermediate care facility**, any premises, other than a residential care facility I, residential care facility II, or skilled nursing facility, which is utilized by its owner, operator, or manager to provide twenty-four hour accommodation, board, personal care, and basic health and nursing care services under the daily supervision of a licensed nurse and under the direction of a licensed physician to three or more residents dependent for care and supervision and who are not related within the fourth degree of consanguinity or affinity to the owner, operator, or manager of the facility;

(9) **Manager**, any person other than the administrator of a facility who contracts or otherwise agrees with an owner or operator to supervise

the general operation of a facility, providing such services as hiring and training personnel, purchasing supplies, keeping financial records, and making reports;

(10) **Medicaid**, medical assistance under section 208.151, RSMo, et seq., in compliance with Title XIX, Public Law 89-97, 1965 amendments to the Social Security Act (42 USC 301 et seq.), as amended;

(11) **Neglect**, the failure to provide, by those responsible for the care, custody, and control of a resident in a facility, the services which are reasonable and necessary to maintain the physical and mental health of the resident, when such failure presents either an imminent danger to the health, safety, or welfare of the resident or a substantial probability that death or serious physical harm would result;

(12) **Operator**, any person licensed or required to be licensed under the provisions of sections 198.003 to 198.096 in order to establish, conduct, or maintain a facility;

(13) **Owner**, any person who owns an interest of five percent or more in:

(a) The land on which any facility is located;

(b) The structure or structures in which any facility is located;

(c) Any mortgage, contract for deed, or other obligation secured in whole or in part by the land or structure in or on which a facility is located; or

(d) Any lease or sublease of the land or structure in or on which a facility is located. "Owner" does not include a holder of a debenture or bond purchased at public issue nor does it include any regulated lender unless the entity or person directly or through a subsidiary operates a facility;

(14) **Resident**, a person who by reason of aging, illness, disease, physical or mental infirmity receives or requires care and services furnished by a facility and who resides or boards in or is otherwise kept, cared for, treated, or accommodated in such facility for a period exceeding twenty-four consecutive hours;

(15) **Residential care facility I**, any premises, other than a residential care facility II, intermediate care facility, or skilled nursing facility, which is utilized by its owner, operator, or manager to provide twenty-four hour care to three or more residents, who are not related within the fourth degree of consanguinity or affinity to the owner, operator, or manager of the facility and who need or are provided with shelter, board, and with protective oversight, which may include storage and distribution or administration of medications and care during short-term illness or recuperation;

(16) **Residential care facility II**, any premises, other than a residential care facility I, intermediate care facility, or skilled nursing facility, which is utilized by its owner, operator, or manager to provide twenty-four hour accommodation, board, and care to three or more

residents, who are not related within the fourth degree of consanguinity or affinity to the owner, operator, or manager of the facility and who need or are provided with supervision of diets, assistance in personal care, storage and distribution or administration of medications, supervision of health care under the direction of a licensed physician, and protective oversight, including care during short-term illness or recuperation;

(17) **Skilled nursing facility**, any premises, other than a residential care facility I, a residential care facility II, or intermediate care facility, which is utilized by its owner, operator, or manager to provide for twenty-four hour accommodation, board, and skilled nursing care and treatment services to at least three residents who are not related within the fourth degree of consanguinity or affinity to the owner, operator, or manager of the facility. Skilled nursing care and treatment services are those services commonly performed by or under the supervision of a registered professional nurse for individuals requiring twenty-four hours a day care by licensed nursing personnel including acts of observation, care and counsel of the aged, ill, injured or infirm, the administration of medications and treatments as prescribed by a licensed physician or dentist, and other nursing functions requiring substantial specialized judgment and skill;

(18) **Vendor**, any person selling goods or services to a health care provider.

(L. 1979 S.B. 328, 432, 35 & 419 § 3, A.L. 1984 S.B. 451, A.L. 1987 S.B. 277)

Effective 6-19-87

198.073. Persons eligible for care in residential care facility I or residential care facility II.—1. A residential care facility II or residential care facility I shall admit and retain only those persons who are capable mentally and physically of negotiating a normal path to safety using assistive devices or aids when necessary, and who are substantially capable of caring for their personal needs within the limitations of such facilities, and who do not require hospitalization or intermediate or skilled nursing care.

2. Those persons previously qualified for residence who may have a temporary period of incapacity due to illness, surgery, or injury, which period does not exceed forty-five days, may be allowed to remain in a residential care facility II or residential care facility I if approved by a physician.

(L. 1979 S.B. 328, 432, 35 & 419 § 24, A.L. 1984 S.B. 451)

198.076. Department of social services to establish standards and regulations for residential care facilities I and residential care facilities II.—The department shall promulgate reasonable standards and regulations for all residential care facilities I and all residential care facilities II. The standards and regulations shall take into account the level of care provided and the number and type of residents served by the facility to insure maximum flexibility. These standards and regulations shall relate to:

(1) The number and qualifications of employed and contract personnel having responsibility for any of the services provided for residents;

(2) The equipment, facilities, services, and supplies essential to the health and welfare of the residents.

(3) Fire safety and sanitation in the facility;

(4) Diet, which shall be based on good nutritional practice;

(5) Personal funds and property of residents;

(6) Resident rights and resident grievance procedures appropriate to the levels of care, size, and type of facility;

(7) Recordkeeping appropriate to the levels of care, size, and type of facility;

(8) Construction of the facility;

(9) Care of residents.

(L.1979 S.B. 328, 432, 35 & 419 § 25, A.L. 1984 S.B. 451)

198.079. Department of social services to establish standards and regulations for intermediate care and skilled nursing facilities.—The department shall promulgate reasonable standards and regulations for all intermediate care facilities and all skilled nursing facilities. The standards and regulations shall take into account the level of care provided and the type of residents served by the facility. These standards and regulations shall relate to:

(1) The number and qualifications of employed and contract personnel having responsibility for any of the services provided for residents;

(2) The equipment, facilities, services, and supplies essential to the health and welfare of the residents;

(3) Fire safety and sanitation in the facility;

(4) Diet, which shall be related to the needs of each resident and based on good nutritional practice and on recommendations which may be made by the physician attending the resident;

(5) Personal funds and property of residents;

(6) Resident rights and resident grievance procedures;

(7) Recordkeeping, including clinical and personnel records;

(8) The construction of the facility, including plumbing, heating, ventilation, and other housing conditions which shall insure the health, safety, and comfort of residents and protection from fire hazards;

(9) Care of residents;

(10) Social and rehabilitative service;

(11) Staff training and continuing education.

(L. 1979 S.B. 328, 432, 35 & 419 § 26)

198.082. Nursing assistant training programs—training incomplete, special requirements, and supervision for assistant beginning duties.—1. Each nursing assistant hired to work in a skilled nursing or intermediate care facility after January 1, 1980, shall have successfully completed a nursing assistant training program approved by the department or shall enroll in and begin the first available approved training program which is scheduled to commence within ninety days of the date of the nursing assistant's employment. Training programs shall be offered at a location most reasonably accessible to the enrollees in each class. The program may be established by the skilled nursing or intermediate care facility, by a professional organization, by the department, by any junior college, or by the vocational education department of any high school.

2. As used in this section the term **"nursing assistant"** means an employee, including a nurse's aide or an orderly, who is assigned by a skilled nursing or intermediate care facility to provide or assist in the provision of direct resident health care services under the supervision of a nurse licensed under the nursing practice law, chapter 335, RSMo. This section shall not apply to any person otherwise licensed to perform health care services under the laws of this state. It shall not apply to volunteers or to members of religious or fraternal orders which operate and administer the facility, if such volunteers or members work without compensation.

3. The training program after January 1, 1989, shall consist of at least the following:

(1) A training program consisting of at least seventy-five classroom hours of training on basic nursing skills, clinical practice, resident safety and rights, the social and psychological problems of residents, and the methods of handling and caring for mentally confused residents such as those with Alzheimer's disease and related disorders, and one hundred hours supervised and on-the job-training. The one hundred hours may consist of normal employment as nurse assistants under the supervision of a licensed nurse; and

(2) Continuing in-service training to assure continuing competency in existing and new nursing skills. All nursing assistants trained prior to January 1, 1989, shall attend, by August 31, 1989, an entire special retraining program established by rule or regulation of the department which shall contain information on methods of handling mentally confused residents and which may be offered on premises by the employing facility.

(4) Nursing assistants who have not successfully completed the nursing assistant training program prior to employment may begin duties as a nursing assistant only after completing an initial twelve hours of basic orientation approved by the department and may provide direct resident care only if under the general supervision of a licensed nurse prior to completion of the seventy-five classroom hours of the training program.

(L. 1979 S.B. 328.432, 35 & 419 § 27, A.L. 1988 S.B. 602)

State of Missouri

Long-term Care Facility Regulations and Licensure Law

for Residential Care Facilities I & II, Intermediate Care Facilities, Skilled Nursing Facilities

Department of Social Services, Division of Aging, 1990
D.A. 504P (10-90)

Rules of Department of Social Services
Division 15 — Division of Aging

Note: The following is the Table of Contents for the State of Missouri's Long-Term Care Facility Regulations and Licensure Law. Items with asterisks are reprinted in full in this manual. To obtain a copy of the entire publication, write: Division of Aging, P.O. Box 1337, 615 Howerton Court, Jefferson City, MO 65102-1337.

198.003 – 198.186 RSMo.	State Statute-Missouri Nursing Home Licensure Law.
13 CSR 15-10.010	General Licensure Requirements
13 CSR 15-10.020	Classification of Rules
13 CSR 15-10.030	Assessment of Availability of Beds
13 CSR 15-11.010 *	Definition of Terms
13 CSR 15-13.010 *	Nurse Assistant Training Program
13 CSR 15-13.020 *	Medication Technician Training Program
13 CSR 15-13.030 *	Level I Medication Aide
13 CSR 15-14.012	Construction Standards for New Intermediate Care and Skilled Nursing Facilities, and Additions to and Major Remodeling of Intermediate Care and Skilled Nursing Facilities
13-CSR 15-14.022	Fire Safety Standards for New and Existing Intermediate Care and Skilled Nursing Facilities
13 CSR 15-14.032	Physical Plant Requirements for New and Existing Intermediate Care and Skilled Nursing Facilities

13 CSR 15-14.042	Administration and Resident Care Requirements for New and Existing Intermediate Care and Skilled Nursing Facilities
13 CSR 15-14.052	Dietary Requirements for New and Existing Intermediate Care and Skilled Nursing Facilities
13 CSR 15-15.012	Construction Standards for New and Existing Residential Care and Newly Licensed Residential Care Facilities I and II
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13 CSR 15-17.010	Definitions (Sanitation)
13 CSR 15-17.020	General Sanitation Requirements for New and Existing Long-Term Care Facilities
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13 CSR 15-18.020	Resident's Funds and Property

13 CSR 15–13.010

Nurse Assistant Training Program

PURPOSE: *The Omnibus Nursing Home Act mandates in section 198.082, RSMo (Supp. 1981) that nursing assistants employed in skilled nursing and intermediate care facilities complete an approved training program. This rule gives information regarding the purpose of the training program, required objectives and curriculum content, designates what is the approved course curriculum, and indicates the training locations and testing which are required for a program to be considered approved.*

Editor's Note: The secretary of state has determined that the publication of material incorporated by reference in this rule would be unduly cumbersome or expensive. Therefore, a copy of the manual entitled ***Nursing Assistant in a Long-Term Care Facility*** *and a copy of the instructor's manual, referred to in subsection (6)(A) has been filed with the secretary of state. It may be found at the headquarters of the agency or may be obtained from the University of Missouri-Columbia. It will be available to any interested person at a cost not more than the actual cost of reproduction.*

(1) Definitions:

(A) **Basic course**—shall mean the seventy-five (75) hours of classroom training, the one-hundred (100) hours of on-the-job supervised training, and the final examination of the approved Nurse Assistant Training course.

(B) **Challenge the final examination**—shall mean taking the final examination of the basic course.

(C) **Long-term care association**—shall mean a professional organization which shall include, but is not limited to, the Missouri Health Care Association, the Missouri Association of Homes for the Aged, or the League of Nursing Home Administrators.

(D) **Nursing service**—shall mean an agency which employs a pool of nurses and nursing assistants for temporary or intermittent placement in long-term care facilities.

(E) **Training agency**—shall mean the organization which sponsors the approved training program.

(2) The purpose of the Nurse Assistant Training Program shall be to prepare individuals for employment in a long-term care facility. The program shall be designed to teach skills in resident care which will qualify students to perform uncomplicated nursing procedures and to assist licensed practical nurses or registered professional nurses in direct residential care.

(3) All aspects of the Nurse Assistant Training Program included in this rule, (that is qualified instructor, clinical supervisor, examiner, approved course curriculum, supervised on-the-job training, testing, and student qualifications) shall be met in order for a program to be considered as approved. A state-approved professional or practical nursing program is also considered as an approved program.

(4) The program shall consist of a basic course consisting of a minimum of seventy-five (75) classroom hours of training on basic nursing skills, fire safety and disaster training, resident safety and rights, social and psychological problems of residents, and the methods of handling and caring for mentally confused residents such as those with Alzheimer's disease and related disorders; one hundred (100) hours of supervised on-the-job training (clinical practice); a final examination; and, following the basic course, continuing in-service training as provided for in 13 CSR 15-14.042(18).

(5) The intent of the program shall be to ensure that the nurse assistant will be able to—demonstrate good personal habits; recognize the nurse assistant's role as it fits into the organizational structure of a long-term health care facility; identify responsibilities of the nurse assistant to the resident and health care team and in the area of safety and infection control; demonstrate basic skills and techniques in performing uncomplicated nursing procedures according to program standards; organize and administer nursing care to residents based on a plan of care and/or direction from charge personnel; and demonstrate knowledge of residents' rights in assisting residents with their activities of daily living.

(6) Curriculum content of the program shall include procedures and instructions on basic nursing skills in the following areas: basic hygiene techniques; bedmaking; personal care of residents; food service; charting; safety measures (including fire/safety and disaster preparedness, and infection control); basic preventative and restorative care and procedures; basic observation procedures, that is, weighing, measuring, etc.; communication skills; methods of handling and caring for mentally confused residents; resident rights; and ethical and legal responsibilities.

(A) The course curriculum as outlined in the manual entitled *The Nurse Assistant in a Long-Term Care Facility,* produced by the Instructional Materials Laboratory, University of Missouri-Columbia, 1987, catalogue number 50-5061-S shall be considered the approved course curriculum. Other manuals and course material may be used to supplement the curriculum. Instructors shall use the companion instructor's guide, catalogue number 50-5061-I.

(B) An orientation module consisting of certain topics identified as such in the approved course curriculum shall be the first material covered in the course unless the course is taught in entirety before nursing assistants have resident contact.

1. The orientation module shall include as a minimum the

following topics: handwashing, gloving, and infection control; emergency procedures and Heimlich Maneuver, resident's rights; abuse and neglect reporting; safety (fire and accident); lifting; moving and ambulation; answering signal lights; bedpan, urinal, commode and toilet; preparing residents for and serving meals; feeding the helpless; bathing; dressing and grooming; mouth care; and bedmaking (occupied and unoccupied).

2. Students must complete the orientation module taught by a qualified instructor even though they may be employed in a facility which has used the approved course material for orientation as required by 13 CSR 15-14.042(16). The instructor may, in that instance, adjust the time required to cover the material or may integrate the material into the basic course content.

(C) The suggested time schedule which is included for each curriculum topic in the approved course cited in subsection (6)(A) shall normally be followed; however, as with the orientation module, the time required may be adjusted by the instructor to meet the particular learning abilities of the students in each class.

(D) The on-the-job supervised component of one hundred (100) hours shall start after the student has enrolled and started the course curriculum and shall precede the final examination.

(E) Continuing in-service education shall be offered in the skilled nursing or intermediate care facility to nursing assistants on a regular basis following their successful completion of the basic course as required in 13 CSR 15-14.042(18).

(7) Student enrollment and qualifications

(A) Any individual who is employable by a skilled nursing or intermediate care facility to be involved in direct resident care shall be eligible to enroll in the course. A student may be younger than eighteen (18) years of age, but no less than sixteen (16) years of age, if—1) currently enrolled in a secondary school health services occupation program or a cooperative work education program of an area vocational-technical school or comprehensive high school; 2) is placed for work experience in an intermediate or skilled nursing facility by that program; and 3) is under the direct supervision of the instructor and/or licensed nursing staff of the facility.

(B) All full-time or part-time employees of a skilled nursing or intermediate care facility who are involved with direct resident care, and who are or were hired in that capacity after January 1, 1980, shall have completed an approved nurse assistant training program or shall enroll in and begin study in an approved training program within ninety (90) days of employment, except as follows:

1. Persons who were enrolled in a professional (R.N.) or practical (L.P.N.) nursing education program for at least four (4) months or who are enrolled in such a program and who have completed the Fundamentals of Nursing Course may challenge the final examination of the course, as this training is deemed equivalent to the required classroom hours and on-the-job training.

2. Professional Nursing or Practical Nursing licensure can-

didates who have failed state licensure examinations may challenge the final examination, as their training is deemed equivalent to the required classroom hours and on-the-job training.

3. Persons from other states who can show documentation of successful completion of a similar state-approved course may challenge the final examination, as their training is deemed equivalent to the required classroom hours and on-the-job training.

4. Foreign students who have completed a nursing program outside the United States and who are awaiting licensure shall be required to complete the orientation module of the course as given in 13 CSR 15-13.010(6)(B) of this rule and then may challenge the final examination, as their training is deemed equivalent to the other required classroom hours and on-the-job training.

5. Persons trained in hospitals as nursing assistants or as psychiatric aides shall complete the orientation module with special emphasis on the geriatric residents' needs, resident rights, and orientation to the facility and shall complete the one hundred (100) hours of on-the-job training and then may challenge the final examination, as their training is deemed equivalent to the other required classroom hours;

6. Persons employed by a skilled nursing or intermediate care facility as nursing assistants prior to January 1, 1980, for at least three (3) years and who submit a recommendation from the administrator or director of nursing may challenge the final examination, as their training is deemed equivalent to the required classroom hours and on-the-job training; and

7. Persons who, immediately prior to employment, worked as nursing assistants for at least three (3) years in a different nursing facility and who can provide documentation of such continuous employment at one such facility prior to January 1, 1980, and who submit a recommendation from the administrator or director of nursing of that facility, may challenge the final examination, as their training is deemed equivalent to the required classroom hours and on-the-job training.

(C) Those persons designated in paragraphs (7)(B)1. through 7. who want to challenge the final examination, shall submit a request in writing to the Division of Aging enclosing any applicable documentation. The Division of Aging will respond, in writing, either approving or denying the request, and if approved, the letter from the division may be presented to a qualified examiner or instructor so that arrangements can be made at an approved training facility to challenge the examination or complete the course as required.

(D) Those persons permitted to challenge the final examination shall have made arrangements to do so within sixty (60) days of employment and shall take the next regularly scheduled examination.

(E) Nursing assistants who are employed by a nursing service shall have completed an approved program prior to functioning in an intermediate care or skilled nursing facility.

(F) Allied health care personnel such as emergency medical technicians, medical laboratory technicians, surgical technicians, central supply technicians, and dental auxiliaries shall not be considered

qualified and shall not be allowed to challenge the final examination. Such individuals, if employed by a skilled nursing or intermediate care facility to provide direct patient care shall enroll in and successfully complete an approved program.

(G) If a student drops the course due to illness or incapacity, the student may re-enroll in the same facility within six (6) months and make up the course material missed without retaking the entire course.

(H) A student must complete the entire basic course (including passing the final examination) within four (4) months of employment.

(I) A full-time or part-time employee of a skilled nursing or intermediate care facility who is employed as a nursing assistant after January 1, 1989 who has not completed at least the classroom portion of the basic course shall not provide direct resident care until completing the twelve (12) hours of supervised practical orientation required in 13 CSR 15-14.042(16).

(J) All nursing assistants trained prior to January 1, 1989 who are not trained utilizing the course curriculum referenced in subsection 13 CSR 15-13.010(6)(A) with at least seventy-five (75) hours of classroom instruction shall attend by August 31, 1989 a special four (4) hour retraining program which utilizes the manual entitled *"Long-Term Care Nurse Assistant Update"* produced by the Instructional Materials Laboratory, University of Missouri-Columbia, 1989, catalogue numbers 50-5062-I or 50-5062-S. Any nursing assistant who does not attend this retraining program by August 31, 1989 shall no longer be considered a trained nursing assistant and all previous credentials issued by any source shall be considered invalid. In order to be certified as required by 13 CSR 15-13.010(12)(B)2 such a person shall either complete the entire nursing assistant training program or shall receive instruction utilizing the update manual and shall successfully pass the final examination of the nursing assistant training course administered by a state-approved examiner with a score of at least eighty percent (80%).

1. The update course shall be taught by an RN instructor who has been approved by the Division of Aging or the Missouri Department of Elementary and Secondary Education to teach the Nurse Assistant Training Program.

2. The update course shall be offered in one of the training facilities referenced in 13 CSR 15-13.010(8) or in a hospital. If, however, a sponsoring agency or an instructor is unable to make arrangements for training in one of these locations, an alternate site may be approved by the division upon request to the director. Arrangements shall be made so that equipment and supplies, as stipulated by the division, are on hand.

3. The instructor shall verify that each student qualifies to take the class by reviewing his/her credentials and if the student does not have the needed documentation shall assist him/her to obtain this from the original training agency.

4. The instructor/student ratio shall be a maximum of one to twenty-five (1-25).

5. The course material may be taught in one session or may be divided into separate units. It may also be presented as part of a

facility in-service education program if the facility has the appropriate training facilities.

6. The instructor shall administer either the tests and interaction items included at the end of each unit or shall administer a final examination made up of at least twenty-five questions from these tests. The examination(s) may be either in written or oral form and the student shall receive an average score of at least seventy (70) on all the tests or the single test. If the student does not successfully pass the test or tests, he/she shall retake the course or the appropriate section(s) of the course as determined necessary by the instructor. This process shall be completed by August 31, 1989. Any student(s) who completed the retaining update course prior to the effective date of this rule shall be deemed as having successfully completed the retraining and shall be eligible for certification.

7. The instructor shall submit to one of the long-term care associations or other agencies approved by the division to issue certificates, the names of all students in his/her class(es) who have successfully completed the retraining program along with the fee required for issuance of a card or certificate. Each validating instructor shall make every effort to see that the nursing assistants obtain this credential and if unable to give the credential to the student shall retain it for at least one (1) year and then return it to the association from which it was issued.

8. Each nursing assistant shall present his/her card or certificate to his/her employer to validate completion of the retraining course and shall retain the original for his/her own records.

(8) The classroom training shall be offered in one (1) of the following training facilities:

(A) Area vocational technical schools and comprehensive high schools currently offering health service occupation programs provided such schools have a written agreement of cooperation with one (1) or more skilled nursing or intermediate care facilities in their vicinity for the on-the-job training.

(B) Community junior colleges or private agencies approved by the Missouri Department of Elementary and Secondary Education and/or accredited by a nationally recognized accrediting agency or association on the list published by the Secretary of the Department of Education, pursuant to the Higher Education Act (20 USC section 295-4 (2)(D), 42 RSC section 298 b(6)) and the Veterans' Readjustment Assistance Act (38 USC section 1775(a)) provided such schools have a practice laboratory with one (1) or more bed units and equipment used in delivering health care and which have a written agreement of cooperation with one (1) or more skilled nursing or intermediate care facilities in their vicinity for the on-the-job training; or

(C) Licensed skilled nursing and intermediate care facilities.

(9) Instructor/student ratio shall be a maximum of one to fifteen (1:15) and it is recommended that the ratio be one to ten (1:10), or less.

(10) Qualifications of Instructors, Clinical Supervisors, and Examiners

(A) Instructor

1. An instructor shall be a registered professional nurse currently licensed in the state of Missouri, or shall have a temporary permit from the State Board of Nursing.

2. An instructor shall have had one (1) year's work experience in a long-term care facility within the past five (5) years; or shall be currently employed in a long-term care facility and shall have been employed by that facility for at least six (6) months; or shall be an instructor in a Health Occupations Education program which is approved by the Missouri Department of Elementary and Secondary Education and/or accredited by a nationally recognized accrediting agency or association on the list published by the Secretary of the Department of Education, pursuant to the Higher Education Act (20 USC section 403(b), 20 USC section 1085(b), 20 USC section 1141(a)) the Public Health Service Act (42 USC section 293 a (B), 42 USC section 295-4(2)(D), 42 USC section 298 b(6)) and the Veterans' Readjustment Assistance Act (38 USC section 1775(a)) and which is affiliated with a long-term care facility.

3. An applicant to be an instructor other than one teaching in a public school, shall submit credentials (resume) and a copy of his/her current license renewal card to the Division of Aging. A letter shall be provided by the division to the applicant indicating the status of the applicant's qualifications and, if not qualified, the reasons and what additional requirements are needed. Instructors with letters of approval issued by the Missouri Department of Elementary and Secondary Education shall not be required to resubmit their credentials to the Division of Aging.

4. An applicant to be an instructor shall attend a seminar approved by the Division of Aging to learn methodology of teaching the course, but only after his/her credentials have been reviewed and approved by the Division of Aging. The Division of Aging shall issue a final letter of approval to be a qualified instructor after the person has satisfactorily completed the seminar. The seminar shall be conducted either by a long-term care association or the Missouri Department of Elementary and Secondary Education using qualified teacher educators approved by the Missouri Department of Elementary and Secondary Education and the Division of Aging.

(B) Clinical Supervisor (on-the-job supervisor). The clinical supervisor shall be a registered professional nurse or licensed practical nurse currently licensed in the state of Missouri or shall have a temporary permit from the Missouri State Board of Nursing. The clinical supervisor shall be currently employed by the facility where the students are performing their duties or by the agency conducting the course and shall attend the first available seminar approved by the Division of Aging to learn methodology of supervising the on-the-job training.

(C) Examiner

1. The examiner shall be a registered professional nurse currently licensed in the state of Missouri or shall have a temporary

permit from the Missouri State Board of Nursing.

2. The examiner shall have taught a similar course or shall be qualified to teach a similar course; shall not have been the instructor of the course; and either the instructor or the examiner may be employed by the operator whose students are being examined, but not both.

3. The examiner shall have attended an examiner's seminar approved by the Division of Aging to learn the methodology. The seminar shall be conducted either by a long-term care association or by the Missouri Department of Elementary and Secondary Education using qualified teacher educators approved by the Missouri Department of Elementary and Secondary Education and the Division of Aging.

4. The examiner shall be registered as an examiner either with the Missouri Department of Elementary and Secondary Education or with the Division of Aging.

(D) If an instructor, clinical supervisor, or examiner is found to have acted or knowingly omitted any duty in a manner which would materially and adversely affect the health, safety, welfare, or property of a resident, the person shall not be considered approved.

(11) Testing

(A) A student shall pass a minimum of three (3) written or oral tests throughout the course with a seventy (70) average score in order to be eligible to take the final examination.

(B) The final examination will be conducted by a registered professional nurse examiner who may be assisted by the registered professional nurse instructor utilizing the following procedures:

1. The instructor will select a long-term care resident to participate in the testing process and obtain approval for this activity from the resident;

2. The examiner will verify the eligibility of the students by review of competency records (that is successful completion of a minimum of seventy-five (75) classroom hours, one hundred (100) hours of supervision, and the required tests as specified in 13 CSR 15-13.010(10)(A)1). In the event that a qualified instructor for the nurse assistant long-term care program did not sign records of a student who has successfully completed the program, without justification or due to resigning from their position, the administrator of the facility or the public education agency assigned to health occupations may validate the training by signature. Evidence of successful completion of the basic course (that is test scores, class schedules, etc.) must be documented prior to a student taking the final examination; and

3. The student shall successfully complete at least six (6) procedures under the observation of the instructor and examiner.

A. The six (6) procedures shall always include a type of bath, vital signs (temperature, pulse, respirations, and blood pressure) and transfer techniques from the standardized curriculum.

B. The remainder shall be selected according to the resident's care needs at the time of day that testing occurs.

C. The evaluation of the student shall include communi-

cation and interaction with the resident, provision of privacy, work habits, appearance, conduct, and reporting and recording skills.

D. The student shall successfully answer twenty (20) out of twenty-five (25) oral questions presented by the examiner based on the standardized curriculum.

4. Any person who fails the final examination except those who have been permitted to challenge the examination, shall have the opportunity to retake the examination within ninety (90) days. If it is failed again, the entire course or selected sections, as determined by the examiner, must be retaken before another examination can be given.

5. Any person who is required by section 198.082 RSMo to enroll in the nurse assistant program but who has been permitted to challenge the final examination and who fails the examination, must immediately re-enroll in and begin study in the next available course and shall complete the basic course within one (1) year of employment.

(12) Records and Certification

(A) Records

1. The examiner shall complete and sign the competency record sheet and the final examination score sheet which shall include scores and comments.

2. A copy of the student's final record sheets shall be provided to the student. If the course is not completed, records and documentation regarding the portions completed shall be provided to the student if requested.

3. The training agency shall maintain the records of students trained.

(B) Certification and Entry of Names on State Register

1. The student or the training agency shall submit the student's final record sheets to any one of the long-term care associations or any other agency which is specifically approved by the Division of Aging to issue nursing assistant certificates and provide names to the division for entry on the Nurse Assistant Register.

2. Each student shall obtain a certificate from a state-approved association or agency validating successful completion of the training program.

3. The Division of Aging shall maintain a list of long-term care associations or other agencies approved to handle the issuance of certificates for the Nurse Assistant Training Program. In order for a long-term care association or agency to be approved by the Division of Aging, it shall enter into an agreement of cooperation with the Missouri Division of Aging which shall be renewable annually and shall effectively carry out the following responsibilities:

A. Review all documents submitted by students to assure that both the instructor, clinical supervisor, and the examiner are qualified in accordance with 13 CSR 15-13.010(6);

B. Assure that all program requirements have been met as set forth in these rules or as stipulated in the agreement with the Division of Aging;

C. Issue certificates to individuals who have successfully completed the course;

D. Provide the Division of Aging with the names of those receiving certificates on at least a monthly basis; and

E. Maintain accurate and complete records for a period of at least two (2) years.

Auth: sections 198.079 and 198.082, RSMo (1986). Original rule filed Aug. 13, 1982, effective Jan. 13, 1983. Amended: Filed March 10, 1983, effective June 11, 1983. Amended: Filed Sept. 12, 1984, effective Dec. 13, 1984. Amended: Filed Oct. 13, 1987, effective Jan. 29, 1988. Emergency Amendment filed: Dec. 16, 1988, effective Jan. 1, 1989, expired April 5, 1989. Amended: Filed Jan. 19, 1989, effective April 27, 1989.

13 CSR 15–13.020

Medication Technician Training Program

PURPOSE: *Individuals who administer medications in skilled nursing and intermediate care facilities are required by 13 CSR 15-15.14.042(46) to have successfully completed a medication administration training program approved by the Division of Aging. This rule sets forth the requirements for the approval of a medication technician training program designating the required course curriculum content, outlining the qualifications required of students and instructors, designating approved training facilities, and outlining the testing and certification requirements.*

Editor's Note: The secretary of state has determined that the publication of material incorporated by reference in this rule would be unduly cumbersome or expensive. Therefore, a copy of the manual entitled ***Medication Technician*** *and a copy of the instructor's manual, referred to in subsection (4)(A) has been filed with the secretary of state and may also be found at the headquarters of the agency. It will be available to any interested person at a cost not more than the actual cost of reproduction.*

(1) The purpose of the Medication Technician Training Program shall be to prepare individuals for employment as certified medication technicians in a long-term care facility. The program shall be designed to teach skills in medication administration of nonparenteral medications which will qualify students to perform this procedure to assist licensed practical nurses or registered professional nurses in drug therapy.

(2) All aspects of the Medication Technician Training Program included in this rule shall be met in order for a program to be considered approved. If the program is to be offered in an intermediate skilled nursing facility, the administrator of that facility shall make the arrangements with the sponsoring educational agency to: provide the pretesting and review of the qualifications of the students, arrange for a certified instructor, administer the final examination, and certify the students.

(3) The objective of the Medication Technician Training Program shall be to ensure that the medication technician will be able to—prepare, administer, and chart medications by all routes except those given by the parenteral route; observe, evaluate, report, and record responses of residents to medications given; identify responsibilities associated with control and storage of medications; identify appropriate reference materials; relate side effects, interactions, and nursing implications of common medications; identify lines of authority and areas of responsibility, and identify what constitutes a medication error.

(4) The course shall consist of at least forty (40) classroom hours of instruction and a minimum of eight (8) hours of clinical practice under the supervision of an instructor or licensed nurse designated by the sponsoring educational agency, including a minimum of two (2) hours' final practicum in a long-term care facility and a final written and practicum examination. The hours of clinical practice may be greater, based on each student's mastery of course content as determined by the instructor.

(A) The course developed by the Missouri Department of Elementary and Secondary Education and the Division of Aging as outlined in the manual entitled *Medication Technician* produced by the Instructional Materials Laboratory, University of Missouri-Columbia revised 1986, catalogue number IE-10-S shall be the approved course curriculum. Students shall each have a copy of this manual. The instructor shall use the companion instructor's guide, catalogue number IE-10-I.

(B) The curriculum content shall include procedures and instructions in the following areas: basic review of body systems and drug effect on each; medical terminology; drug classifications; dosage; measurements and forms; storage and accountability; problems of observations in drug therapy; and administration by oral, rectal, vaginal, otic, ophthalmic, nasal, skin, and special categories.

(C) A student shall not be allowed to administer medication until successful completion of the course.

(5) Student Qualifications.

(A) Any individual employable in a skilled nursing or intermediate care facility to be involved in direct resident care shall be eligible to enroll as a student in the course if the following criteria are also met:

1. High school diploma or General Education Development (G.E.D.);

2. Score seventy-five percent (75%) on the Basic Essential Skill Test (BEST) on subparts: reading and arithmetic (to be administered by public education sector); and

3. One (1) year employment as a nurse assistant who has completed the state-approved nurse assistant training course. If employment has been less than one (1) year, a letter of recommendation must be submitted to the training facility by the administrator or director of nursing of the long-term care facility.

4. Nursing assistants enrolling in the course may or may not be currently employed in a long-term care facility.

(B) Students shall have successfully completed the approved nurse assistant training program as outlined in 13 CSR 15-13-010 prior to beginning the medication technician training program, except those individuals employed in a facility which is licensed or operated by the Missouri Department of Mental Health.

(C) The following individuals may qualify as medication technicians by successfully challenging the course through a written and performance final examination:

1. Students enrolled in a professional nursing school or in a

practical nursing program who have completed the medication administration course and who have letters of endorsement from the directors of their respective program;

2. Individuals who successfully completed a professional or practical nursing program but who failed the professional (R.N.) or practical (L.P.N) state licensure examination;

3. Individuals who provide evidence of successful completion of a state-approved medication technician course while working as an aide at a facility licensed or operated by the Missouri Department of Mental Health; however, such individuals shall successfully complete the orientation module of the approved nurse assistant training program and challenge the course by successfully completing the final examination of that program prior to being allowed to challenge the Medication Technician course by successfully completing that final examination.

(D) The following individuals may qualify as medication technicians without taking the course or having to challenge the final examination:

1. Individuals trained by Missouri Division of Health Institutional Advisory Nurses prior to 1978, and individuals certified through the vocational educational system using the approved Division of Health curriculum. A card file of the names of the individuals trained by the Division of Health is maintained in the central office of the Division of Aging and the individuals have been issued cards certifying their status;

2. Individuals who have completed a medication technician course in another state which has been approved by the appropriate state agency in that state and who submit a letter of recommendation from an administrator or director of nursing of a facility in which they served as a medication technician; and

3. Individuals who have successfully completed a professional or practical nursing program and who have not yet taken the state licensure examination.

(E) Those persons designated in subsections (5)(C) and (D) who want to challenge the final examination or receive a letter of qualification, shall submit a request in writing to the Division of Aging enclosing any applicable documentation.

1. If approved to challenge the examination, a letter will be sent from the division, and may be presented to a sponsoring education agency so that arrangements can be made for testing.

2. If approved to qualify without taking the course or challenging the examination, a letter so stating will be sent, and can be presented and used in lieu of a certificate.

(F) Individuals who must qualify by successfully completing the final examination or through specially qualifying shall not be allowed to administer medications until successful completion of the challenge process or until receiving a letter of qualification from the Division of Aging.

(6) Instructor Qualifications

(A) An instructor shall be currently licensed to practice as a

registered nurse in the state of Missouri or shall have a temporary permit from the Missouri State Board of Nursing.

(B) The instructor shall meet state certification requirements as follows: Hold a current teaching certificate from the Department of Elementary and Secondary Education, Division of Career and Adult Education; complete an instructor/examiner workshop to implement the program; and be responsible to a sponsoring education agency—an area vocational-technical school, a comprehensive high school, a community or junior college, or an approved four (4)-year institution. Pharmacists may assist as guest instructors in the areas of drug distribution systems, regulations governing drugs, drugs' actions, adverse reactions, and drug interactions.

(C) When the instructor is an employee of the long-term care facility in which training is conducted, a qualified registered nurse approved by the sponsoring education agency shall conduct the final examinations. The examiner may be the instructor.

(7) Training Facility.

(A) The classroom may be located in an area vocational-technical school, a comprehensive high school, a community-junior college, and approved four (4)-year institution, or an off-campus classroom located in a skilled nursing or intermediate care facility provided the course is sponsored by one (1) of the previously mentioned educational agencies. All classrooms shall contain sufficient space, equipment, and teaching aids to meet the course objectives as determined by the sponsoring educational agency.

(B) The long-term care facility in which clinical practice and the final practicum examination will be conducted shall allow students, instructors, and examiners access to the medication room, supervised access to residents, and access to the medication recording area.

(C) There shall be a signed written agreement between the sponsoring education agency and a cooperating long-term care facility which specifies the roles, responsibility, and liabilities of each party.

(8) Testing

(A) Pretesting (the Basic Essential Skills Test) shall be administered by qualified testers designated by the sponsoring education agency.

(B) Students shall achieve an average score of eighty-five (85) overall on the written examinations in the course curriculum to be eligible for the final examination.

(C) The final examination shall consist of a written and practicum examination.

1. The written examination shall include fifty (50) questions based on the course objectives. A score of eighty-five (85%) is required for passing.

2. The practicum examination shall include the preparation and administration by all nonparenteral routes and recording of medications administered to residents. It shall be administered under the

direct supervision of the instructor (or examiner) and the person responsible for medication administered in the long-term care facility. Testing on medications not available in the long-term care facility shall be done in a simulated classroom situation.

3. The final examination, if not successfully passed, may be retaken one (1) time without repeating the course within ninety (90) days.

(D) The instructor and examiner (where applicable) shall complete the final records and the record sheet shall include competencies and scores.

(9) Records and Certification

(A) Records

1. The sponsoring education agency shall maintain the records of individuals who have been enrolled in the medication technician program and shall submit to the Division of Aging the names and addresses of all individuals who successfully complete the program.

2. A copy of the final record shall be provided to the medication technician if requested.

3. A transcript may be released with written permission from the student in accordance with the provisions of the Privacy Act-P.L. 90-247

(B) Certification

1. The sponsoring education agency shall award a certificate documenting successful completion of the state-approved medication technician course.

2. The sponsoring education agency which administers the challenge examination to qualified applicants shall award a certificate documenting successful completion of the state-approved medication technician course by challenge.

Auth: section 198.079, RSMo (1986). Original rule filed Aug. 13, 1982, effective Jan. 13, 1983. Amended: filed Oct. 13, 1987, effective Jan. 29, 1988.

13 CSR 15–13.030

Level I Medication Aide

PURPOSE: Individuals who administer medications in Residential Care Facilities I and II are required by 13 CSR 15-15.042(37) to be either a physician, a licensed nurse, a certified medication technician, or a level I medication aide. This rule sets forth the requirements for approval of a level I medication aide training program designating the required course curriculum content, outlining the qualifications required of students and instructors, designating approved training facilities, and outlining the testing and certification requirements.

Editor's Note: The secretary of state has determined that the publication of material incorporated by reference in this rule, specifically the manual entitled ***Level I Medication Aide*** *produced by the Instructional Materials Laboratory, University of Missouri* (1985), *would be unduly cumbersome or expensive. Therefore, a copy of the manual has been filed with the secretary of state and may also be found at the headquarters of the agency. It will be available to any interested person at a cost of not more than the actual cost of reproduction.*

(1) The purpose of the Level I Medication Aide Training Program shall be to prepare individuals for employment as level I medication aides in residential care facilities I and II. The program shall be designed to teach skills in medication administration of nonparenteral medications in order to qualify students to perform this procedure only in residential care facilities I & II in the state of Missouri.

(2) All aspects of the Level I Medication Aide Training Program included in this rule shall be met in order for a program to be considered approved.

(3) The objective of the Level I Medication Aide Training Program shall be to ensure that the medication aide will be able to—define the role of a level I medication aide; prepare, administer, and chart medications by non-parenteral routes; observe, report, and record unusual responses to medications; identify responsibilities associated with control and storage of medications; and utilize appropriate drug reference materials.

(4) The course shall be an independent self-study course with a minimum of eight (8) hours of integrated formal instruction and practice sessions supervised by an approved instructor which shall include a final written and practicum examination.

(5) The curriculum content shall include procedures and instructions in

the following areas: basic human needs and relationships; drug classifications and their implications; assessing drug reactions; techniques of drug administration; medication storage and control; and drug reference resources.

(6) The course developed by the Missouri Department of Elementary and Secondary Education and the Division of Aging as outlined in the manual entitled *Level I Medication Aide* (IE 64-1) produced by the Instructional Materials Laboratory, University of Missouri-Columbia, shall be the approved course curriculum. Students and instructors shall each have a copy of this manual.

(7) A student shall not administer medications without the instructor present until he/she successfully completes the course and obtains a certificate.

(8) Student qualifications

(A) Any individual employable in a residential care facility I or II to be involved in direct resident care shall be eligible to enroll as a student in this course or to challenge the final examination.

(B) The following individuals may qualify as level I medication aides by successfully challenging the final examination:

1. Individuals either enrolled in or who have been enrolled in a professional nursing school or in a practical nursing program who have completed the medication administration or pharmacology course and who have letters of endorsement from the directors of their respective programs;

2. Individuals who provide evidence of successful completion of a state-approved medication technician course while working as a psychiatric aide at a Missouri state school or individuals already trained in medication administration while employed in a facility licensed by the Missouri Department of Mental Health prior to September 30, 1985.

3. Individuals employed in residential care facilities II who were trained in medication administration prior to September 30, 1985; and

4. Individuals approved by an approved long-term care association according to the following criteria:

A. Shall have been employed in a long-term care facility for at least three (3) years;

B. Shall be currently employed as the administrator or manager of a long-term care facility;

C. Shall be proficient in measuring vital signs (PTR, B/P); and

D. Shall be able to demonstrate reading, writing, and self-study skills.

(9) Those persons wanting to challenge the final examination shall submit a request in writing to an approved long-term care association enclosing applicable documentation. If approved to challenge the exami-

nation, a letter so stating will be sent from the association to present to an approved instructor so that arrangements can be made for testing.

(10) Instructor Qualifications

(A) An instructor shall be currently licensed to practice as either a registered nurse or a practical nurse in the state of Missouri or shall hold a current temporary permit from the Missouri State Board of Nursing. If the individual is a licensed practical nurse, the following additional requirements shall be met:

1. Shall not be waivered; and
2. Shall be a graduate of an accredited program which has pharmacology in the curriculum.

(B) In order to be qualified as an instructor, the individual shall have had one (1) year's experience working in a long-term care facility within the past five (5) years; or shall be currently employed in a long-term care facility and shall have been employed by that facility for at least six (6) months; or shall be an instructor in a Health Occupations Education program; and shall have attended a "Train the Trainer" workshop to implement the Level I Medication Aide program conducted by a registered nurse presenter approved by the Department of Elementary and Secondary Education.

(C) Upon completion of the workshop and receipt of all credentials validating qualifications, the presenter shall issue a certificate indicating that the instructor is approved to teach the Level I Medication Aide course and shall submit the names of the approved instructors to the approved long-term care association.

(11) Sponsoring Agencies

(A) The Level I Medication Aide Training Program may be sponsored by an area vocational-technical school, a comprehensive high school, a community-junior college, a college or university approved by the Department of Elementary and Secondary Education, a currently licensed Residential Care Facility I or II, or a long-term care association.

(B) The sponsoring agency is responsible for obtaining an approved instructor, determining the number of manuals needed for a given program, ordering the manuals for the students, and presenting a class schedule for approval by an approved long-term care association, to include—the name of the approved instructor; the number of students enrolled; the name, address, telephone number, and age of each student; the name and address of the facility that employs the student, if applicable; the date and location of each class to be held; and the date and location of the final examination. The long-term care association which approved the course shall be notified in advance if there are any changes in dates or locations.

(C) Classrooms used for training shall contain sufficient space, equipment, and teaching aids to meet the course objectives as determined by an approved long-term care association.

(D) If the instructor is not directly employed by the agency, there shall be a signed written agreement between the sponsoring agency and

the instructor which shall specify the role, responsibilities, and liabilities of each party.

(12) Testing

(A) The final examination shall consist of a written and a practicum examination administered by the instructor.

1. The written examination shall include twenty-five (25) questions based on the course objectives.

2. The practicum examination shall include the preparation and administration by non-parenteral routes and recording of medications administered to residents under the direct supervision of the instructor. If testing is not done in a long-term care facility, it shall be done in a simulated classroom situation.

(B) A score of eighty percent (80%) is required for passing the final written examination and one hundred percent (100%) accuracy in the performance of the steps of procedures in the practicum examination.

(C) The final examination, if not successfully passed, may be retaken within ninety (90) days one (1) time without repeating the course. However, those challenging the final examination must complete the course if the examination is not passed in the challenge process.

(D) The instructor shall complete final records and shall submit these and all test booklets to the sponsoring agency.

(13) Records and Certification

(A) Records

1. The sponsoring agency shall maintain records of all individuals who have been enrolled in the Level I Medication Aide Program and shall submit to the long-term care association which approved the course all test booklets, a copy of the score sheets, and a complete class roster.

2. A copy of the final record shall be provided to any individual enrolled in the course.

3. A final record may be released only with written permission from the student in accordance with the provisions of the privacy act (PL 90-247).

(B) Certification

1. The long-term care association which approved the course shall award a Level I Medication Aide certificate to any individual successfully completing the course upon receiving the required final records and test booklets from the sponsoring agency

2. The long-term care association which approved the course shall submit to the Missouri Division of Aging the names of all individuals receiving certificates.

(14) The Division of Aging shall maintain a list of long-term care associations approved to handle the Level I Medication Aide Training Program. In order for a long-term care association to be approved by the Division of Aging, the association shall enter into an agreement of cooperation with the Missouri Division of Aging which shall be renew-

able annually and shall effectively carry out the following responsibilities:

(A) Review and approve credentials of students who wish to challenge the final examination;

(B) Maintain a roster of approved instructors;

(C) Approve sponsoring agencies, class schedules, and classroom space;

(D) Distribute final examinations, review test booklets, score sheets, and class rosters;

(E) Award certificates to individuals who successfully complete the course, provide the Division of Aging with the names of those receiving certificates; and

(F) Maintain records.

Auth: section 198.076, RSMo (Supp. 1984). Original rule filed May 14, 1985, effective Sept. 1, 1985. Amended: Filed Oct. 16, 1985, effective Jan. 12, 1986.

13 CSR 15–13.040

Insulin Administration Training Program

PURPOSE: *This rule sets forth the requirements for approval of an insulin administration training program, designates the required course curriculum content, outlines the qualifications required of students and instructors, and outlines the testing and records requirements.*

Editor's note: The secretary of state has determined that the publication of material incorporated by reference in this rule would be unduly cumbersome or expensive. Therefore, a copy of the manual entitled ***Insulin Administration*** *and a copy of the instructor's manual, referred to in section (4), has been filed with the secretary of state. It may be found at the headquarters of the agency or may be obtained from the University of Missouri-Columbia. It will be available to any person at a cost established by state law.*

(1) The purpose of the Insulin Administration Training Program shall be to prepare medication technicians in a skilled nursing or intermediate care facility or medication aides in a residential care facility I or II to administer insulin. The program shall be designed to present information on diabetes as it relates to symptoms and implications of proper or improper treatment, and to teach skills in insulin administration in order to qualify students to perform this procedure in long-term care facilities in Missouri.

(2) The course shall consist of at least four (4) hours of classroom instruction by an approved instructor and shall include a final written and practicum examination.

(3) The curriculum content shall include procedures and instruction in the following areas: diabetes and its treatment and complications; types of insulin; technique of insulin administration, and methods of monitoring blood sugar levels.

(4) The course entitled *Insulin Administration* (IE-80-I) produced by the Instructional Materials Laboratory, University of Missouri - Columbia, shall be the approved course curriculum. Students and instructors shall each have a copy of the manual.

(5) A student shall not administer insulin without the instructor present until s/he has successfully completed the course.

(6) Student Qualifications.

(A) Any level I medication aide working in a residential care facility who is recommended in writing for training by an administrator/

manager or nurse with whom s/he has worked shall be eligible to enroll as a student in this course.

(B) Any certified medication technician who is recommended in writing for training by the administrator or director of nursing with whom s/he has worked shall be eligible to enroll as a student in this course. The letter of recommendation shall be given to the training agency or instructor at enrollment.

(C) Any certified medication technician or level I medication aide, or other person who was trained prior to December 31, 1990 to administer insulin in a residential care facility by a licensed nurse or physician not using the state-approved course, may challenge the final examination. The challenges shall be completed prior to April 1, 1991.

(D) Those persons wanting to challenge the final examination shall submit a request in writing to a certifying agency enclosing a signed statement from the physician or licensed nurse indicating prior training. If approved to challenge the examination, a letter so stating will be sent to the individual to present to an approved instructor/examiner so that arrangements can be made for testing.

(E) Any certified medication technician or level I medication aide who took the state-approved Insulin Administration Course taught by a licensed nurse prior to December 31, 1990 shall be eligible to receive a certificate without retaking the course or challenging the final examination. S/he shall send the documentation of such to a certifying agency.

(7) Instructor Qualifications. Only a registered nurse who is an approved instructor for the Level I Medication Aide Program, instructor/examiner for the Certified Nurse Assistant Program, or instructor for the Certified Medication Technician Program shall be considered qualified to teach the Insulin Administration Course.

(8) Testing

(A) The final examination shall consist of a written and practicum examination administered by an approved instructor or examiner.

1. The written examination shall include ten (10) questions extracted from the list in the instructor's manual.

2. The practicum examination shall include the preparation, administration, and recording of administration of insulin to a resident(s) under the direct supervision of the instructor/examiner.

(B) A score of eighty percent (80%) is required for passing the final written examination and one hundred percent (100%) accuracy in the performance of the steps of procedure in the practicum examination.

(C) The final examination, if not successfully passed, may be retaken one (1) time within thirty (30) days without repeating the course.

(D) Those challenging the final examination shall complete the course if the examination is not passed in the challenge process.

(9) Records

(A) The instructor shall complete the final record of the

insulin administration course and shall distribute copies in the following manner:

1. A copy shall be provided to each individual who successfully completes the course or who successfully challenges the final practicum examination.

2. A copy shall be kept in the instructor's file.

3. The original shall be sent to a certifying agency.

(B) Each student shall obtain a certificate from a state-approved certifying agency validating successful completion of the training program.

(C) Records shall be retained by instructors for at least two (2) years.

(D) The Division of Aging shall maintain a list of approved certifying agencies to handle issuance of certificates for the Insulin Administration Program. In order for an agency to be approved by the Division of Aging to be a certifying agency, it shall enter into an agreement of cooperation with the Division of Aging which shall be renewable annually, and the agency shall effectively carry out the following responsibilities:

1. Review all documents submitted by the instructor to assure the instructor is qualified in accordance with 13CSR15-13.040(7);

2. Assure that all program requirements have been met as set forth in these rules or as stipulated in the agreement with the Division of Aging;

3. Issue certificates to individuals who successfully complete the course, who successfully challenge the course, or who present documentation of eligibility as referenced in 13 CSR 15-13.040(6)(E);

4. Provide the Division of Aging with the names of those receiving certificates on at least a monthly basis; and

5. Maintain accurate and complete records for a period of at least two (2) years.

Auth: Sections 198.009, 198.073, and 198.076 RSMo (1990). Original rule filed October 15, 1990, effective March 14, 1991.

13 CSR 15–11.010

Definition of Terms

PURPOSE: *To define terms used in the rules for long-term care facilities as set forth in Chapters 14, 15, 17, and 18.*

Editor's Note: The secretary of state has determined that the publication of this rule in its entirety would be unduly cumbersome or expensive. The entire text of this rule has been filed with the secretary of state. The entire text of the rule may be found at the headquarters of the agency and is available to any interested person at a cost not more than the actual cost of reproduction.

(1) **Administrator**—An individual person who is in general administrative charge of a facility.

(2) **Certified medication technician**—Shall mean a nursing assistant who has completed a course in medication administration approved by the Division of Aging.

(3) **Chemical restraint**—Shall mean any drug, utilized in such a strength or in such a manner as to suppress normal physical or mental activity.

(4) **Communicable disease**—Any illness, disease, or condition reportable to the Missouri Division of Health as required by 13 CSR 50-101.010 and 13 CSR 50-101.020 is considered, for the context of these rules, a communicable disease.

(5) **Control of medication**—Shall mean assuming responsibility for the storage and distribution or administration of medication.

(6) **Designee**—Shall mean an individual who has been designated in writing by a resident to handle matters and receive reports related to his/her personal possessions and property.

(7) **Emergency medical procedure**—Shall mean those written policies and procedures which describe the types and degrees of accidents and injuries, how they will be treated, by whom, in which instances the resident's physician will be notified, and how quickly.

(8) **Existing or existing licensed facility**—Shall mean a long-term care facility which was licensed and in operation or one whose plans were approved prior to June 10, 1981 for a skilled or intermediate care facility, or prior to November 13, 1980 for residential care facilities I and II.

(9) **Exit**—Shall mean a door leading to the outside or through a horizontal exit in a fire wall to a fire-safe area in the building.

(10) **Fire-resistant construction**—For intermediate care facilities and skilled nursing facilities, fire-resistant construction shall mean that a facility meets the specifications for two (2)-hour fire-resistive construction or protected non-combustible construction as given in the National Fire Protection Association Code 220. The definition of fire-resistant construction for residential care facilities I and II is given in 13 CSR 15-15.022(34).

(11) **Hazardous area**—Shall mean furnace rooms other than electric forced air furnaces, laundries, kitchens, maintenance shops and storage rooms of over one hundred (100) square feet and any areas which contain combustible materials which will be either easily ignited, burn with an intense flame, or result in the production of dense smoke and fumes.

(12) **Level I medication technician**—Shall mean an individual who has completed a course approved by the Division of Aging in medication administration in a residential care type of facility.

(13) **Long-term care facility**—Shall mean a facility that is licensed either solely or in combination as a skilled nursing facility, an intermediate care facility, a residential care facility II, or a residential care facility I or II.

(14) **Major fraction thereof**—Shall mean anything over fifty percent (50%) of the number of occupied beds.

(15) **Major remodeling**—Shall mean any remodeling of a long-term care facility which involves the addition of resident-use rooms or which affects fire safety or the structure of the building.

(16) **Multi-story building**—Shall mean any building with more than one (1) floor entirely above the grade. A floor that is partially below grade will be counted as the first story to determine sprinkler requirements only if it contains resident sleeping rooms.

(17) **New or newly licensed facility**—Shall mean a long-term care facility whose plans are approved or which is licensed after June 10, 1981 for a skilled nursing or intermediate care facility or after November 13, 1980 for a residential care facility I or II.

(18) **Nursing personnel**—Shall include any employee, including a nurse's aide or an orderly, who provides or assists in the provision of direct resident health care services.

(19) **Operator**—Shall mean any person licensed or required to be licensed under the provisions of sections 198.003-198.096, RSMo. in

order to establish, conduct, or maintain a facility. The term person required to be licensed shall mean any person having the following, as determined by the division:

(A) Ultimate responsibility for making and implementing decisions regarding the operation of the facility;

(B) Ultimate financial control of the operation of a facility; and

(C) Legal right to possession of the premises on which a facility is located.

(20) **Physical restraint**—Shall mean anything which serves to inhibit physical mobility including, but not limited to, any type of strap or harness or any locked door which is not customarily locked as a matter of security.

(21) **Physician**—Shall mean an individual licensed to practice medicine by the state of Missouri under chapter 334, RSMo.

(22) **Premises**—Shall mean any structure or structures that are in close proximity one to the other and which are located on a single piece of property.

(23) **Protective oversight**—Shall mean having continuous awareness of a resident's functioning and the resident's whereabouts, the ability to intervene if a crisis arises for the resident, supervision of nutrition or medication or actual provision of care, and a twenty-four (24)-hour responsibility for the welfare of the resident.

(24) **Qualified dietitian**—Shall mean an individual who is registered by the American Dietetic Association or who is eligible for registration.

(25) **Qualified therapist**—Shall mean an individual who is either registered or is eligible for registration by the national accrediting association for that therapy or, if applicable, is licensed by the state of Missouri for the practice of the profession in which he/she is engaged.

(26) **Qualified therapy assistant**—Shall mean the individual who would be qualified as an occupational therapy or physical therapy assistant as outlined in CFR 405.1101.

(27) **Responsible party**—Shall mean an individual who has been designated in writing by the resident to handle matters and receive reports related to his general condition.

(28) **Self-administration of medication**—Shall mean the act of actually taking or applying medication to oneself.

(29) **Self-control of medication**—Shall mean assuming responsibility for the storage and administration of medication for oneself.

(30) **Skilled nursing care**—Shall mean services furnished pursuant to physicians' orders which require the skills of licensed nurses and which are provided directly by or under the on-site supervision of such personnel. Examples of skilled nursing care may include, but are not limited to: administration of levine tube or gastrostomy tube feedings; nasopharyngeal and tracheotomy aspiration; insertion of medicated or sterile irrigation solutions and replacement of catheters; administration of parenteral fluids; inhalation therapy treatments; administration of other treatments requiring aseptic technique; and administration of injectable medication other than insulin.

Auth: section 198.009, RSMo (1986). Emergency rule filed Sept. 7, 1979, effective Sept. 28, 1979, expired Jan. 24, 1980. Original rule filed Sept. 7, 1979, effective Jan. 12, 1980. Amended: filed Dec. 10, 1980, effective June 11, 1981. Amended: Filed Dec. 10, 1981, effective May 11, 1982. Rescinded and readopted: Filed July 13, 1983, effective Oct. 13, 1983. Amended: Filed Nov. 9, 1983, effective Feb. 11, 1984. Emergency amendment filed Aug. 1, 1984, effective Aug. 13, 1984, expired Dec. 10, 1984. Amended: Filed Sept. 12, 1984, effective Dec. 13, 1984. Amended: Filed Aug. 1, 1988, effective Nov. 11, 1988.

✣ Resources

The better the materials you have to work with, the better teaching job you can do.

The following pages include an order blank for ordering the instructor and student guides used in the programs outlined in this book and other useful publications from the **Instructional Materials Laboratory.**

Also included are a variety of other materials you may wish to order to help you keep abreast of your field or help you add more interest to your classes.

What's inside:

Page

- Descriptions of IML curriculums and an order form 8.1
- Books, publications, films and videos 8.5
- Quality Training Specialists videos 8.11
- Media Center slide shows and videos 8.15
- Missouri Hospital Association resources 8.23
- Sample Mayo Clinic Health Letter ..... Not numbered

Note: Prices quoted in this section were accurate at the time of printing. However, prices change constantly. To be sure, check the source.

Long-Term Care Facility Curriculums

Note: These curriculums are punched to fit a three-ring binder which is not included. See page 8.3 for binder descriptions.

Nurse Assistant in a Long-Term Care Facility

Completing this state-approved course qualifies persons to assist LPNs/RNs in direct patient care. Includes eight units on the Nurse Assistant, understanding the elderly, safety, food service, personal care, elimination, restorative nursing, and special procedures.

50-5061-I	Instructor (requires 2" binder)	$45.00
50-5061-S	Student (requires 2" binder)	$16.45
50-5061-R	Student Response Forms	$10.95

Nurse Assistant in a Long-Term Care Facility Supplementary Units for Special Needs

Units are designed to aid special needs students enrolled in nurse assistant programs. Units correlate with selected units in the instructional guide, "Nurse Assistant in a Long-Term Facility" (50-5061-I). Vocabulary, math skill development, competency checklists, and sequential, illustrated, step-by-step procedures are provided in each unit.

90-5641-S	Student (requires 1" binder)	$12.20
90-5641-I	Instructor Key (requires 1" binder)	$3.45

Restorative Nurse Assistant

Units include introduction to restorative nursing, communications, psychosocial aspects of disability, anatomy, and physiology of the long-term care resident, pathology of the long-term care resident, specific care problems of the long-term care resident, and basic procedures.

50-5070-I	Instructor (requires 2" binder)	$41.55
50-5070-S	Student	$**

Confused Resident Care

Provides basic orientation and skills necessary for the Certified Nurse Assistant to care for the confused elderly resident in a long-term care facility. Seven units covering the areas of dementia, communication, special care needs, family dynamics, stress management, and special resources are included, as well as a pre-test and post-test.

50-5080-I	Instructor (requires 1" binder)	$14.60
50-5080-S	Student	$**

Level I Medication Aide

Self-study course with eight hours of formal instruction. Designed for those involved with distribution of medications to residents in a residential care facility I or II, or a community residential facility. Covers

techniques of administering/distributing drugs, drug interactions and side effects, control and storage of drugs, and purpose of drug references.

50-6064-I Instructor (requires 1" binder) $14.10

Medication Technician

Prepares Medication Technicians to master competencies for preparation, administration, and recording of medications other than those given by the parenteral route. Those completing this course are qualified to administer medications.

50-6010-I Instructor (requires 2" binder) $29.80
50-6010-S Student (requires 1" binder) $15.55

Insulin Administration

Three units for training Certified MedicationTechnicians working in a long-term care facility to administer insulin.

50-6080-I Instructor (requires 1" binder) $4.35
50-6080-S Student (requires 1" binder) $2.35

LPN Intravenous Fluid Therapy Course

Units include documentation, anatomy and physiology as applied to IV therapy, administration of IV fluid therapy, IV fluid therapy maintenance, pharmacological considerations of IV medication, blood transfusion therapy, total parenteral nutrition. Includes 15 step-by-step procedures, 26 informational lessons, handouts, transparency masters, and assignment sheets.

50-6081-I Instructor (requires 2" binder) $40.50
50-6081-S Student (requires 2" binder) $25.00

Activities Director in a Long-Term Care Facility

A curriculum on how to stimulate physical and psychosocial abilities and self-worth in the long-term care resident. Includes understanding the resident, resident care management, program planning and implementation, and department management.

50-5106-I Instructor (requires 2" binder) $25.00

Perspectives on Aging

Training materials with extensive bibliographies assist individuals working with the elderly to acquire necessary knowledge and understanding of the aging process, nutritional needs, pharmacologic factors, and the psychosocial impacts of aging.

50-5612-I Instructor (requires 1" binder) $25.00

Health Oriented Training (HOT) Topics

HOT Topics training packages are easy, convenient, and complete and can be used to customize in-service programs for long-term care. Each

log number contains enough handouts for ten students of the same topic. Inservices are designed to be quick, easy ten-minute sessions.

50-5201-I	Body Mechanics	$10.00
50-5202-I	Abuse & Neglect of Elderly Clients	$10.00
50-5203-I	Nail Care	$10.00
50-5204-I	Nutrition & the Elderly	$10.00
50-5205-I	Hand Washing	$10.00
50-5206-I	Client's Rights	$10.00
50-5207-I	Oral Care	$10.00
50-5208-I	Preventing Confusion	$10.00
50-5209-I	Safety Measures/Environmental Precautions	$10.00
50-5210-I	Validation Therapy	$10.00

Tricks of the Trade – The Magic of Teaching Adults

This videotape prepares adult education instructors for teaching and includes the difference in teaching adults, the importance of lesson plans, and time management.

31-0008V	Video	$25.00

Home Health Aide

This course covers ethical and legal responsibilities, time management, the in-home patient, communication skills, home safety, personal care skills, and diagrams of the body systems.

50-4131-I	Instructor	$37.15
50-4131-S	Student	$22.00
50-4131-R	Student Response Forms	$5.10

Psychiatric Aide I

This course for entry-level nursing service employees working in mental health facilities demonstrates basic nursing interventions and techniques and covers the role of the psychiatric aide, communication, physical care skills, and care of the mentally ill.

50-7062-I	Instructor	$40.00
50-7062-S	Student	$29.85

Notebooks

Tan 1-Inch Notebook

Light tan vinyl three-ring notebook has full-size clear pocket on the front cover and backbone for inserting title.

35-0047-S	Three-Ring Binder	$4.60

Blue 1 1/2-Inch Notebook

Blue vinyl three-ring notebook has full-size clear pocket on front cover and backbone for inserting title.

35-0370-S	Three-Ring Binder	$6.00

Brown 2-Inch Notebook

Brown three-ring binder for universal use has a full-size clear pocket on the front cover and backbone for inserting title.

35-0015-S Three-Ring Binder $5.45

Instructions for Ordering from Instructional Materials Laboratory

(Order form on next page.)

Identify each item ordered by catalog number, title, and price. Non-Missouri residents should order material labeled MAVCC directly from Mid-America Vocational Curriculum Consortium, Stillwater, OK.

Telephone orders may be placed by calling IML toll free at 1-800-669-2465 or FAX your order to 314/882=1992. If a hard copy of the purchase order is sent, it must be marked "Confirming Order" to avoid duplication in processing your order. **The customer will pay all shipping charges resulting from orders not marked "Confirmation."**

Prices are subject to change without notice. Quotes are provided upon request. Listed prices do not include tax or shipping charges. Terms are net thirty days. **Missouri residents receive a 10% in-state discount.**

UPS delivery is used unless otherwise arranged. Please provide street address, highway, or route. **Shipping charges are prepaid and added to the invoice.** Orders should state F.O.B. shipping point. Estimate shipping at 10% of order total with a $3.85 minimum shipping charge.

Purchase orders and authorizing signature should accompany orders from schools and other institutions.

Materials returned within 30 days with proper authorization and in resalable condition will be credited. Bookstores and other firms should order on an actual use basis. Under no circumstances will credit be issued for material returned after 30 days.

Individual purchases will be shipped upon receipt of a check or money order for amount of purchase plus 10% for shipping and handling (with a minimum shipping charge of $3.85). Missouri residents add 6.475% to price of book for in-state tax.

Payment is due upon receipt of invoice. Materials will be invoiced shortly after all materials have been shipped. All checks must be drawn upon a United States bank and payable in United States currency.

ORDER FORM

See instructions on preceding page before ordering

Mail to:
Instructional Materials Laboratory
10 Industrial Education Building
University of Missouri-Columbia
Columbia, MO 65211
Or phone toll-free:
1-800-669-2465

In-state prices listed.
Non-Missouri orders MUST
add 6.5% price increase.

Ship to: _____

_____

_____

_____

Invoice to: _____

_____

_____

_____

Date of Order: _____

Purchase Order Number: _____

Quantity	Catalog Number	Title	Unit Price	Net Price
	50-5061-I	Nurse Assistant-Long Term, Instructor Guide	$ 45.00	
	50-5061-S	Nurse Assistant-Long Term, Student Manual	$ 16.45	
	35-0015-S	Student Response Forms	$ 4.60	
	90-5641-I	Nurse Assistant-Long Term, Supplemental, Instructor Key	$ 2.75	
	90-5641-S	Nurse Assistant-Long Term, Supplemental, Student	$ 12.20	
	50-5070-I	Restorative Nurse Assistant, Instructor	$ 33.25	
	50-5080-I	Confused Resident Care, Instructor	$ 14.60	
	50-6040-I	Level I Medication Aide, Instructor	$ 14.10	
	50-6010-I	Medication Technician, Instructor	$ 23.00	
	50-6010-S	Medication Technician, Student	$ 15.55	
	50-6080-I	Insulin Administration, Instructor	$ 3.65	
	50-6080-S	Insulin Administration, Student	$ 2.10	
	50-6081-I	LPN Intravenous Fluid Therapy, Instructor	$ 32.50	
	50-6081-S	LPN Intravenous Fluid Therapy, Student	$ 25.00	
	50-5106-I	Activities Director in Long-Term Care Facility, Instructor	$ 20.00	
	40-5461-I	Dietary Manager in a Health Care Facility, Instructor	$ 27.00	
	40-5461-S	Dietary Manager in a Health Care Facility, Student	$ 10.00	
	50-5612-I	Perspectives on Aging, Instructor	$ 25.00	
	35-0047-S	1-Inch Binder	$ 3.45	
	35-0370-S	1 1/2-Inch Binder	$ 4.10	
	35-0015-S	2-Inch Binder	$ 4.60	
			Subtotal:	
			6.5% out-of-state accrual:	
			Postage, handling, insurance will be added to invoice (about 8%):	
			TOTAL AMOUNT	

IML USE ONLY

_____

Signature of person ordering

Books, Publications, Videos, and Supplies

The following is a selection of various resources you can tap for material to improve long-term care training courses.

Books

The stores listed below have easy-to-understand, inexpensive, reproducible books on body systems, anatomy, nutrition, and many other health care subjects.

- **Bookmark Book Store**
  Mark Twain Mall
  1355 South Fifth
  St. Charles, MO.
- **Bradburn School Supplies**
  2166 Hampton Ave.
  St. Louis, MO.
- **Obermier's**
  1750 South Big Bend Blvd.
  Maplewood, MO.
- **The Teacher's Store**
  10835 Sunset Hills Plaza
  Sunset Hills, MO.

The following publishers have a variety of excellent books pertaining to Nurse Assistant, Medication Technician, Level I Medication Aide, or Insulin Administration training. For specific books and names of other publishers, check the bibliography in the *Instructor's Guide*.

- **Delmar Publishers** has hundreds of titles available, including the high recommended 6th edition of *Nursing Assistant: A Nursing Process Approach* and *Nursing Assistant Competency Exam Prep and Review Guide*. To request a catalog, write to:

  Delmar Publishers Inc
  Two Computer Drive, West
  P.O. Box 15015
  Albany, NY 12212-5015
  Or call (800) 347-7707

- **J.B. Lippincott Company** is a good source for books related to health care, including *Care of the Older Adult, Illustrated Manual of Nursing Techniques, The Human Body and Disease, Structure*, and *Fundamental Skills in Patient Care.*

  A catalog can be requested by contacting:

  J.B. Lippincott Co.
  P.O. Box 1580
  Hagerstown, MD 21741
  Or call (800) 638-3030

- **Mosby-Year Book** offers several books targeted at Nurse Assistant training along with matching workbooks and instructors' guides. Some books include *Mosby's Textbook for Nursing Assistants* by Sheila

A. Sorrentino, *The OBRA Nurse Aide Skills Manual,* and *The Nurse Assistant in Long Term Care: A Rehabilitative Approach*. For a catalog write to:

Mosby-Year Book
11830 Westline Industrial Drive
St. Louis, MO 63146
Or call (800) 426-4545

- **W.B. Saunders** publishes a 225-page catalog full of textbooks, clinical references, and periodicals. Books include the *Miller-Keane Encyclopedia of Medicine, Nursing and Allied Health, Medical Terminology: A Short Course* and *Introduction to Human Anatomy and Physiology.* To request a catalog, contact:

  W.B. Saunders Company
  Order Fulfillment
  6277 Sea Harbor Drive
  Orlando, FL 32887
  Or call (800) 545-2522

- **Simon & Schuster** (Brady Publishing) has several relevant books, including *"Being a Long-Term Care Nursing Assistant"* (which also has an instructor's guide and workbook to accompany the text). To request information or to order individually, contact:

  Simon and Schuster
  Order Processing Center
  P.O. Box 11071
  Des Moines, IA 50336-1071
  Or call (515) 284-6751

Publications

- Included in the back of this section is a sample of a highly recommended publication, the **Mayo Clinic Health Letter**. This excellent health letter is a bargain at only $24.50 for 12 issues.

  To subscribe, contact:

  Mayo Clinic Health Letter
  Subscription Services
  P.O. Box 53889
  Boulder, CO 80322-2889
  Or call toll free 1-800-333-9038

  Also included is a five-year cumulative index and a form for ordering back issues and copies of the publication's medical essays. A copy of their essay on Alzheimer's disease is also included.

Other publications you may find useful include:

- **Innovative Abstracts**, which provides useful information on teaching methods from the National Institute for Staff and Organizational Development (NISOD). The abstracts are issued weekly during fall

and spring terms and once in the summer.

The cost is $35 a year. Send to:

University of Texas at Austin
Austin, TX 78712
or phone (512) 471-7545

- **AGHE Exchange**, the newsletter of the Association for Gerontology in Higher Education, includes information on principles and practices, program planning, research reports, training materials review, and more.

  The newsletter is published four times per year at a cost of $20. Subscribe by contacting:

  AGHE
  600 Maryland Ave., SW, West Wing 204
  Washington, DC 20024
  Or phone (202) 484-7505

- **NEWS LINK**, a publication of The Community College Nursing Home Partnership, provides information about efforts to improve long-term care through education. It is published three times a year. Contact:

  Ohlone College
  43600 Mission Boulevard
  Fremont, CA 94539
  (415) 659-6102

  or

  Shoreline Community College
  16101 Greenwood Avenue North
  Seattle, WA 98133
  (206) 546-4743

- **The EX.C.I.T.I.N.G (EXtended Care Inservice Teachers' Information Networking Group) Newsletter.**

  Send check or money order for $24.50 for a one-year (10 issues) subscription to:

  EX.C.I.T.I.N.G. Newsletter
  P.O. Box 285
  Eureka, MO 63025-0285

Films and Videos

For films, videos, and tapes to supplement classes, the first place to look would be the sources listed in the course *Instructor's Guide*. Films and videos mentioned for use with several lessons can be borrowed from:

- **Film and Literature Library**
  Missouri Division of Health
  P.O. Box 570
  Broadway State Office Building
  Jefferson City, MO 65102

It is recommended you order the films at least four weeks prior to scheduled showing times.

- The **Missouri Vocational Resource Center** has dozens of quality audiovisual and video programs available — including some of the State Fair Community College and Quality Training Specialists materials outlined following this section — **to lend.** The only charge is return shipping/handling charges.

  Materials are loaned for one week and a maximum of two may be borrowed per week. Materials should be reserved at least ten days in advance. Scheduling materials for the first semester begins August 1 and for the second semester, December 1.

  To request a catalog and order blank, write to:

  Missouri Vocational Resource Center
  8 London Hall
  University of Missouri
  Columbia, MO 65211
  Or call (314) 882-1470 or (314) 882-9610 or (800) 392-7217.

- The **Missouri Division of Aging** also has hundreds of videos, films, and audiotapes available on a free loan basis. You are limited to three titles per booking date. Requests should be made at least two weeks prior to the showing date. To request a copy of their catalog, contact:

  Training Unit
  Division of Aging
  615 Howerton Court
  Jefferson City, MO 65109
  Phone: (314) 751-3082

- **Mosby-Year Book** and **Studio Three** at Samuel Merritt College, St. Louis, Missouri have developed superb videos with high-quality videography to deal with several aspects of Nurse Assistant Training. The videos can be used with Mosby's Nursing Assistant textbooks or with other curriculums.

  Each video is 20 to 25 minutes long and clearly demonstrates the skills and procedures required by the Omnibus Budget Reconciliation Act standards.

Video	Topic	Order No.
#1	Principles for the Nursing Assistant	21736
#2	Lifting, Moving, and Positioning/Range of Motion Exercises	21751
#3	Transfer Techniques/Ambulation/ Measuring Height and Weight	21749
#4	Bed Making	21752
#5	Bed Bath/Perineal Care/Back Message	21740
#6	Grooming/Dressing and Undressing	21739
#7	Nutrition/Oral Hygiene	21738
#8	Assisting with Elimination	21741

#9	Measuring Temperature, Pulse and Respirations	21737
#10	Measuring Blood Pressure	21750
#11	Reporting and Recording Observations	21753
All	All eleven programs	21735

The cost of each video is $150. The cost of all eleven is $1,195. Special discounts are available with the purchase of copies of Mosby's *Textbook for Nursing Assistants.* To order or for further information, contact Mosby-Year Book (800) 426-4545.

- Several excellent videos, some targeted specifically for long-term care instruction, are available from **Quality Training Specialists**. A list of their videos is provided immediately following this section. The cost is $50 per tape.
- Also included is a list of slide shows and videos available from **The Media Center** of the State Fair Community College which offers several good videos for sale. These videos are on page 8.15.
- **The Missouri Hospital Association** also offers various videos, directories, and brochures. A list of their offerings is on page 8.23.
- A new interactive video system developed by **Educational Testing Service, the American Health Care Association, and the Interactive Health Network** provides both training and certification testing for prospective nurse aides.

  Called **ProCare**, the system consists of 16 hours of dramatized simulations and four hours of testing. Test results provide feedback on candidate learning and eventually form the basis for certification. The cost is $8,475. To order, contact **Interactive Health Network,** 6425 Powers Ferry Road, NW, Suite 300, Atlanta, GA 30339. Or call (404) 850-1000.
- An excellent selection of free-loan videos, postage-paid both ways, is available from **Modern Talking Picture Service**, 5000 Park Street North, St. Petersburg Florida 33709. Not all videos are health related, but they will send you a list of available titles every month so you can scan for appropriate topics.
- The **County Library of St. Louis City/St. Louis County** has a 16mm film and video catalog for $4.75 available from its film/video department. Films and videos are free but there is a small insurance charge per film. Contact Carol Mullen, Film/Video Department, St. Louis County Library, 1640 S. Lindberg, St. Louis, MO 63131. Or call (314) 994-03300.
- A brief 11-minute video that addresses the issue of self-esteem which can be of value to adult classes is *Mirrors: A Film About Self-Esteem.* Sponsored by **Keebler Company** and the **National PTA**, it is available for free loan by calling 1-800-243-6877. Or it can be purchased for

$25 by calling 1-800-237-4599 (add mail order tax for other states besides Missouri or Arkansas).

Medical Equipment

- Sphygmomanometers, stethoscopes, carry-alls and other medical equipment is available from **Hopkins Medical Products**, 1120 Wilso Drive, Baltimore MD 21223.
- Medical equipment, mannikins, anatomical models, wall charts, and more are available in catalogs from **Armstrong Medical Industries**, (call toll free (800) 323-4220); **Dyna Med**, (call toll-free (800) 854-2706); and **Simulaids** (which also offers a blood pressure simulator for $595). Call toll-free (800) 431-4310.
- One of the largest catalogs of this sort is the Anatomical Products Catalog available from **Concept Media**, call toll-free (800) 233-7078. This catalog features a wide variety of posters as well as a large selection of books and publications.
- The **Kansas City Area Hospital Educational Television Network** provides a videotape lending service sponsored by the Kansas City Area Hospital Association. Subscription to the service allows access to a library of over 1,300 professionally produced videotapes over a wide range of topics including clinical skills, regulatory issues, safety, universal precautions, liability, customer service, and management issues. For information about the network and subscription fee, contact Nancy Dumoff, Vice-President, Kansas City Area Hospital Educational Television Network, 1001 E. 101st Terrace, Suite 320, Kansas City, MO 64131. Phone (816) 941-2202, Fax: (813) 941-0818.

Miscellaneous

- **Price Systems** offers three computer programs for Apple, IBM, or IBM compatible computers that supplement learning.

  One of these is the Productive Environmental Preference Survey, an adult version of the Learning Style Inventory. Cost is $295 with 100 administrations, $60 for each additional 100 administrations. Answer sheets to work with the program (indicate adult forms) are $60 for 100.

  Order from Price Systems, Inc., P.O. Box 1818, Lawrence, KS 66044 or call 913/843-7892.
- For information about AIDS, call the **National AIDS Information Clearinghouse** at 1-800-458-5231 and ask for a free copy of their *Facts About Aids* packet, the *Aids Prevention Guide and Women*, and *Sex and Aids*. These are written for non-medical readers.
- **J.C. Penny Company** has a catalog of easy-on clothing called *Easy Dressing Fashions*. Call toll-free (800) 222-6161 and ask for item #TA 953-7689 A. The company also has a comprehensive *Uniform Catalog*. Ask for item #TA 953-8034.

Quality Training Specialists Videotapes

Quality Training Specialists provides several videotapes that can be very useful to instructors. The cost is $50 each.

Long-Term Care

These videotapes have been produced to supplement instruction in the Certified Nurse Assistant (CNA) and Certified Medication Technician (CMT) instructor/examiner workshops.

Lesson Plan Format. This presentation explains the lesson plan format as designed and developed by Dr. Franklin J. King. The various components of both an information lesson plan and a demonstration lesson plan are identified and explained.

Concepts in Adult Education. Providing effective instruction for adult learners is both a challenging and a rewarding task. This presentation identifies the characteristics and needs of adult learners, and describes the role of the adult educator.

Implementation of the Course, "Nurse Assistant in the Long-Term Care Facility." Provides an overview of the course "Nurse Assistant in the Long-Term Care Facility," and the basic information necessary to organize and implement the course.

Examiner Role for the Course, "Nurse Assistant in the Long-Term Care Facility." Explains the information necessary to organize, prepare for, and conduct competency evaluations of students in the course "Nurse Assistant in the Long-Term Care Facility." Information regarding completing required student certification records is also included.

Implementation of the Course "Medication Technician." Provides an overview of the course, "Medication Technician," and the basic information necessary to organize and implement the course.

General Principles of Drug Administration in a Long-Term Care Facility. Medications are an integral part of the health care plan a physician prescribes for the resident. This presentation explains the importance of proper medication administration; identifies errors of omission and commission; describes the steps of procedure for preparing, administering, and recording medication; and identifies the Seven Rights of medication administration.

Diabetes

Understanding Diabetes. Provides general information about diabetes, its symptoms, possible complications and treatment; glucose monitoring procedures; and steps of procedure for administering an insulin injection. This supplements the *Insulin Administration Manual.*

Teacher Education

Teacher Developed Individualized Approaches. This module discusses strategies for providing individualized instruction and defines the purpose of individualized evaluation. The component parts of Missouri's Vocational Instructional Management System (VIMS) are discussed in relation to planning individualized instruction.

Handling Difficult Situations / Emergencies. The importance of establishing procedures for handling difficult situations and emergencies is illustrated in this presentation. Legal considerations are also reviewed.

What is Cooperative Vocational Education? Cooperative Vocational Education and the role of the vocational teacher are defined in this presentation. Guidelines for Trade and Industrial and Health Occupations Internships are discussed as well.

Successful Modification of Curriculum / Technology—Special Needs. This module defines the special needs population and discusses modifications of instructional strategies, classroom environment, and technology to meet the special needs of these students.

Effective Vocational Instruction. Describes how the components of Missouri's Vocational Instructional Management (VIM) can be used as a framework for developing curriculum. The importance of maintaining a safe, healthy, and comfortable atmosphere in the classroom and laboratory is also discussed. Finally, the module illustrates how *Guidelines for Performance Based Teacher Evaluation* can be used as a model for effective instruction.

Professional Development. The importance of developing a planned approach to professional development is discussed and certification and recertification requirements are reviewed. Strategies to further professional development through a variety of professional and civic activities are discussed as well.

Effective Discipline. Classroom management and discipline strategies are discussed in this module.

Motivating and Reinforcing Students. The importance of knowing your students, setting the stage for learning, and strategies for motivating and reinforcing students are discussed.

Health Careers

Therapeutic / Restorative Health Care Careers. Describes the variety of challenging careers available in the Therapeutic/Restorative area. Professionals in these careers are trained to help individuals resume normal life activities within the limitations of their abilities.

Institutional Health Care Careers. Explores the role of administrative professionals and the wide range of supportive personnel who

are responsible for the day-to-day operation and maintenance of health care facilities.

Direct Health Care Careers. Direct care professionals have direct, personal contact with patients and their families, and are responsible for meeting both the physical and emotional needs of the patient. This presentation introduces the many career opportunities available in this important health care area.

Diagnostic Health Care Careers. Individuals seeking a career that allows the opportunity for scientific research and investigation and that requires limited patient contact may choose to pursue a diagnostic health care career. This presentation explores five clusters of related occupations in this category.

Community Health Care Careers. Focuses on community health care careers, including careers relating to animal care, environmental health, home health care, and health educational and communication services.

Copies of these videotapes can be purchased by contacting:

Quality Training Specialists
809 W. 11th
Sedalia, MO 65301
(816) 826-4233

The Media Center Slide Shows and Videos

The Media Center is a part of the State Fair Community College in Sedalia, Missouri, and as such, is in touch with the needs of educational programs. Their videos are relevant and concise and are field-tested and evaluated by instructors.

Most programs have accompanying paperwork and instructor's packets with activity sheets, evaluations, and keys. Curriculum-oriented materials follow the Instructional Material Laboratory curriculums (see page 8.1).

Videos are quality 1/2" VHS format.

Nurse Assistant Slides and Video

You can purchase all 16 of these modules for $655 and save 20%.

Lesson Plan Format

This presentation prepares the registered nurse to instruct information and demonstration lesson plans for Nurse Assistant in Long-Term Care Facilities courses. The purpose and component parts of the Lesson Plan Format as developed by Dr. Franklin King are illustrated.

HO-82-1000 (48 slides with audio tape) $46

Concepts in Adult Education

This module presents the characteristics and needs of the adult learner and describes the role of the adult educator. This module was prepared for health occupations educators, but could be used to assist with in-service for other educators dealing with adults.

HO—83-1040 (47 slides with audio tape) $45

Implementation of Course for the Course "Medication Technician"

This module presents the guidelines for implementing the course "Medication Technician." It is designed primarily for in-service education for health occupations educators that will be teaching the course.

HO-83-1050 (61 slides with audio tape) $55

Transcribing Physician's Orders

Administration of medications begins with a physician's order. This module discusses several methods of transferring orders, prescriptions, and use of medication records and completes the process by documenting the medication on the necessary forms.

HO-85-1060 (66 slides with audio tape) $56

General Principles of Drug Administration in a Long-Term Care Facility

This module presents basic guidelines that will help prevent medication errors. Responsibilities are discussed in detail as well as what constitutes an error.

HO-85-1070 (80 slides with audio tape) $65

Communicating with Patients and Co-Workers

This module introduces verbal and non-verbal communication, gestures and body language, listening, and effective on-the-job communicating skills with patients and co-workers.

HO-87-1100 (45 slides with audio tape) $45

Temperature, Part I

This presentation identifies the parts of an oral thermometer and explains shaking down and reading the thermometer.

HO-87-1201 (43 slides with audio tape) $43

Temperature, Part II

Prerequisite HO-87-1201

The process of taking a patient's temperature using an oral thermometer is detailed in this presentation.

HO-87-1202 (37 slides with audio tape) $37

Pulse and Respiration

This program demonstrates how to take a radial and apical pulse and respirations. Basic terminology related to pulse and respiration is included.

HO-87-1203 (73 slides with audio tape) $63

Blood Pressure

The process of accurately taking and recording a blood pressure using a dial blood pressure cuff is covered. Basic terminology in included as well as use of the equipment.

HO-87-1204 (70 slides with audio tape) $60

Weighing and Measuring

This module demonstrates how to weigh and measure a resident.

HO-87-1206 (69 slides with audio tape) $59

Measuring Intake and Output

The measuring of fluid intake and urinary output is detailed in this presentation.

HO-87-1207 (38 slides with audio tape) $35

Body Mechanics

Lifting and moving a patient using good body mechanics is described in this module.

HO-87-1210 (69 slides with audio tape) $59

Arranging Daily Care of Patients

Different time periods of daily patient care and arranging one's work for each time period is discussed. Also included are vocabulary terms used in daily patient care.

HO-87-1400 (66 slides with audio tape) $56

Developing Professional Work Attitudes

This module deals with characteristics and guidelines which are necessary to develop professional work attitudes needed to be a good nurse assistant.

HO-87-1401 (46 slides with audio tape) $44

Careers in Caring

By the year 2000, one-third of all careers will be health related. This videotape is an overview of the five major divisions within this growing industry, and can also be used as part of a powerful recruiting presentation by the health care staff.

HO-90-2000 (Time 11:30) $65

Body Structure and Function Videos

All eight videos can be purchased for $410—a savings of 20%.

Skeletal System

Basic Structure and Function of the Skeletal System

This module introduces the development of bone. It includes the structural components and the generalized parts of bone, lists the basic functions of the skeletal system, and describes the haversian system.

HO-91-530 (Running Time 6:00) $65

Organization of Axial Skeleton

This module presents the component parts of the axial skeleton, markings found on some of the bones, and fontanels and sutures of the skull and their locations.

HO-91-531 (Running Time 17:30) $65

The Pectoral Girdle and Upper Extremities

The bones included in this anatomical area are identified and described along with markings on the bones. This is the first part of two modules

describing the appendicular skeleton.

HO-91-532 (Running Time 7:30) $65

The Pelvic Girdle and Lower Extremities

This is the second of two modules describing the appendicular skeleton. The bones included in this anatomical area are identified and described along with markings on the bones.

HO-91-533 (Running Time 6:00) $65

Respiratory System

Upper Respiratory Tract

This module presents the organs of the upper respiratory tract and discusses how they function to provide transportation of oxygen and carbon dioxide.

HO-91-560 (Running Time 8:00) $65

Bronchial Tree and Lungs

The structure and function of the bronchial tree along with the structure of the lungs are presented in this module.

HO-91-561 (Running Time 4:40) $65

Mechanics of Breathing

The physical changes that lead to inspiration and expiration of air, or the mechanics of breathing, are presented in this module.

HO-91-562 (Running Time 9:40) $65

Exchange of Oxygen and Carbon Dioxide

This module deals with the essential life process of oxygen and carbon dioxide exchange. Internal and external respiration, gas exchanges, and respiratory variables are also included.

HO-91-563 (Running Time 7:40) $65

Long-Term Care Video Series

Concepts in Adult Education

The challenge to adult educators is to provide learning opportunities to help adults reach their personal and professional needs. This video identifies the characteristics and needs of adult learners and describes the role of adult education. Specific topics covered include motivational factors of adult learners, preventing dropouts, maintaining interest, psychological considerations, freedom of expression, developing mutual respect, and providing feedback.

LTC-91-787 (Running Time 7:20) $50

Understanding Diabetes

Diabetes is the sixth leading cause of death among people over age 65. Because of the complexity of the disease, those caring for diabetic residents in long-term care facilities must have a thorough understanding of diabetes, its symptoms, possible complications, and treatment. This presentation discusses the types of diabetes, its symptoms and consequences, types of insulin, frequency and timing of injections, insulin storage, monitoring glucose levels, insulin reactions, preparing the syringe, and administering the injection.

LTC-91-751 (Running Time 14:45) $50

General Principles of Drug Administration in the Long-Term Care Facility

This presentation explains the importance of proper medication administration, identifies and discusses education errors of omission and errors of commission, gives instruction in preparing and administering medications, and offers directions for completing the medication administration form for recording medication.

LTC-91-755 (Running Time 11:10) $50

Implementation of the Course "Medication Technician in the Long-Term Care Facility"

The purpose of the Medication Technician Program is to prepare individuals to administer medications in skilled nursing and intermediate care facilities as required by current regulations. This module presents considerations and instructions for implementing this training course, including the required qualifications for instructors, eligibility requirements for enrollment, obtaining course curriculum materials, preparing class lessons, course length and content, testing coordination with a long-term care facility for conducting the clinical practice, and recording and certifying procedures.

LTC-91-752 (Running Time 11:30) $50

Examiner Role for the Course "Nurse Assistant in the Long-Term Care Facility"

This video discusses the role and qualifications of the professional nurse assistant examiner, scheduling the evaluations, and arranging the payment of the examiner's fee and expenses. It also presents information on organizing, preparing, and conducting competency evaluations and completing student certification records.

LTC-91-753 (Running Time 7:00)) $50

Implementation of the Course "Nurse Assistant in the Long-Term Care Facility"

The objective of this video is to provide guidelines for implementing a nurse assistant training course. Specific topics discussed include the

qualifications required of the instructor, eligibility of students, obtaining curriculum materials, developing a teaching schedule, orienting students to the basic functions of the job, testing, maintaining grade records, requirements to challenge or test out of all or part of the course, completing final records, and submitting records for certification.

LTC-91-754 (Running Time 7:30) $50

Lesson Plan Format

The purpose of the lesson plan format is to help the instructor organize course content. This presentation offers instruction in identifying the component parts of the lesson plan format, teaching from both an information lesson plan and a demonstration lesson plan from the state-approved curriculum guide, and comparing the contents of student and instructor guides.

LTC-91-756 (Running Time 9:05) $50

Health Care Careers Videotape Series

The cost is $50 per videotape or $225 if all five are purchased.

Direct Health Care Careers

Direct health care providers have direct personal contact with patients and their families and serve to fill their physical and emotional health needs. They can be found in hospitals, clinics, private offices, long-term care facilities, or in emergency centers. They may work in disease prevention or health maintenance programs.

Fields highlighted include careers as a nurse, social worker, medical doctor, EMT or paramedic, dentist, medical and dental assistant, and dental laboratory technician.

HCC-91-758 (Running Time 10:40) $50

Diagnostic Health Care Careers

Individuals in the diagnostic health care field undertake scientific research and investigation to determine the presence or absence of disease. Some careers involve operating complex medical equipment or testing samples of body tissues and fluids. New diagnostic career opportunities are continually created as technology advances.

This video discusses some of the diagnostic career opportunities available including radiology, pathology and medical laboratory technician, diagnostic medical equipment personnel, optometry, and speech language pathology and audiology.

HCC-91-759 (Running Time 10:50) $50

Therapeutic/Restorative Health Care Careers

Therapeutic/restorative health care professionals are trained to help individuals return to as normal a life as possible with their physical limi-

tations. Patients may be helped through retraining and fitting of artificial limbs, gaining body function, and independent living skill.

Careers presented include physical therapy, athletic training, occupational therapy, respiratory therapy technician, dietician, pharmacist.

HCC-91-760 (Running Time 10:50) $50

Community Health Care Careers

The emphasis of community health care careers is on health maintenance and prevention of illness. Individuals in this field are trained in a wide variety of functions, such as regulating public health, health education, and environmental health.

Some of the career fields discussed in this video include veterinary medicine, waste disposal management, home health care, environmental engineering, and public health.

HCC-91-761 (Running Time 8:00) $50

Institutional Health Care Careers

Institutional health care careers include administrative and support personnel who provide the essential services for the day-to-day functioning of such facilities as hospitals, nursing homes, rehabilitation centers, and clinics. They assure that health care facilities run smoothly and efficiently, providing a safe and organized environment for their clients. Administrative and support personnel work primarily in office areas and serve in such departments as personnel, accounting, admitting, public relations, medical records, laundry and housekeeping, management, purchasing, and building maintenance.

HCC-91-762 (Running Time 8:35) $50

Copies of these slide shows and video can be purchased by contacting:

The Media Center
State Fair Community College
3201 West 16th St.
Sedalia, MO 65301
1-800-875-8615 Toll Free

See ordering and previewing information on the following page.

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- Please allow 30 days for delivery of preview materials.
- Modules may be previewed at The Media Center without charge when an appointment is made at least one week in advance.

Missouri Hospital Association Resources

The **Missouri Hospital Association** offers various resources—videos, directories, and brochures — in the health career field.

Videos

Careers In Caring is an 11 1/2-minute video giving an overview of the five major career categories within the health care industry.

The following is a series of five major career category videos on "Careers In Caring" (each video is 8-12 minutes):

Direct Health Care Careers — Five career clusters featured are dental, medical, nursing, social service, and mental health.

Diagnostic Health Care Careers — Five career clusters featured are radiologic, medical laboratory, optical, audiologic, and diagnostic equipment.

Therapeutic/Restorative Health Care Careers — Career clusters featured are physical therapy, occupational therapy, respiratory therapy rehabilitation services, dietetics, pharmacy, and reconstruction and replacement.

Community Health Care Careers — Career clusters featured are community services, animal care services, health education and communications, environmental health, and home health services.

Institutional Health Care Careers — Two career clusters featured are: administrative and supportive.

The McMurphy Nursing Project, a 15-minute video, presents interviews with nurses who work in various health care settings.

Your Career in Allied Health (10 minutes) highlights several allied health careers.

Whatcha Gonna Do Now? is a 17-minute health careers video geared toward urban high school students.

Nurses Make a Difference (6 1/2 minutes) is a video about careers in nursing.

Directories and Brochures

Scholarship/Financial Assistance Directory contains information on financial assistance the Missouri hospitals currently provide for students in health care fields.

Health Careers Manual contains job descriptions, educational requirements, average salaries and accredited schools/programs for more than 50 health care positions.

Professional Nursing brochure contains entrance requirements, education, and school information.

200 Ways to Put Your Talent to Work in the Health Field brochure gives straight answers to questions about health careers.

Other career-specific brochures and reprint articles are available upon request.

The Missouri Hospital Association also offers a **Speaker's Bureau** that makes people available to participate in job fairs or career days.

For information concerning these resources contact:

Missouri Hospital Association
P.O. Box 60
Jefferson City, MO 65102
or phone 314-893-3700

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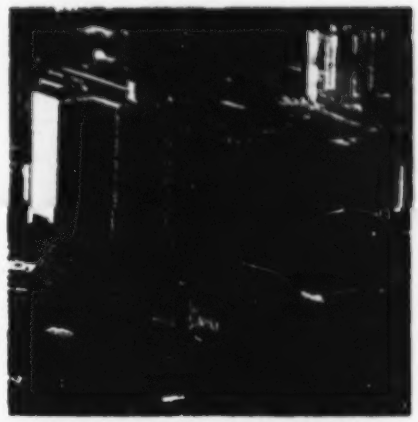

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MAYO CLINIC HEALTH LETTER **January 1988**

- *"Grandpa asks the same question over and over."*

- *"My father seems so frustrated. Even with familiar things, he's at a loss what to do. He can't add gas to the lawn mower. Mom says she's been helping him get dressed in the morning, and she wonders if she should start shaving him, too."*

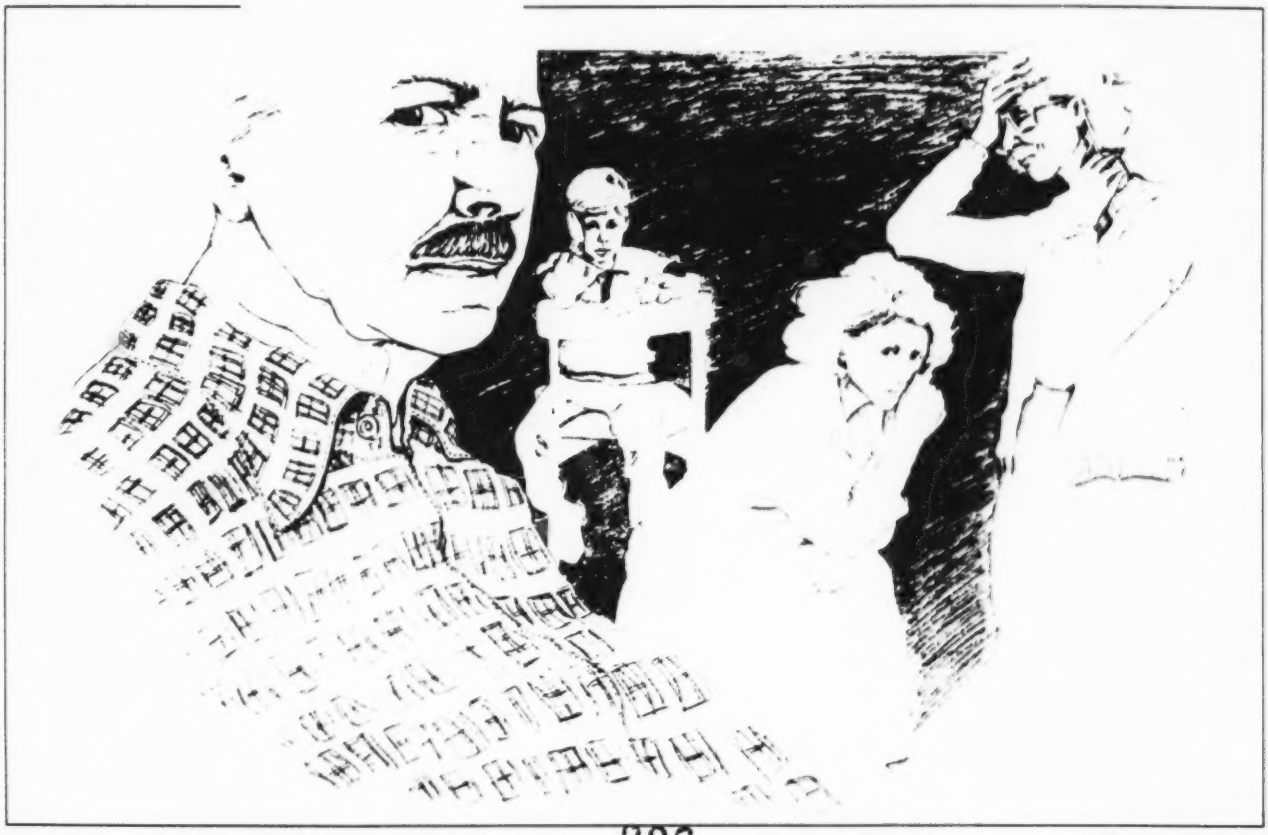
- *"He gets lost in our own house. He's apathetic, wanders around. He'll go into the kitchen for a snack and by the time he opens the refrigerator, he's forgotten what he wants."*

'A LONG GOODBYE'

Coping with Alzheimer's disease and other forms of dementia

The symptoms these people describe are not new. They've existed throughout time, but until recently were dismissed as the pitiful, inevitable result of aging.

Today we know better. And we know more — but not enough — about the cause of these symptoms. They are part of a condition called



Minor forgetfulness does not signal Alzheimer's disease

Everyone forgets things from time to time; this is more common in older persons. Dementia, however, is not "just a part of aging." Key difference: dementia worsens to the point where it interferes with daily activity. Normal forgetfulness is more of a nuisance than a problem; it rarely will get worse.

Here are two examples:

(1) If you can't recall where you left your glasses, that's benign forgetfulness. If you don't remember that you wear glasses, that's dementia.

(2) If you are unable to remember the name of the restaurant where your grandson's wedding reception was held recently, that's benign forgetfulness. But if you don't recall even going to the wedding, that's dementia.

Worrying about dementia will not prevent the condition from occurring. In many cases, there is no reason to be afraid. Eighty percent of older people remain active and alert throughout their lives. The artist Pablo Picasso was turning out masterworks up until his death at age 91.

dementia. This is not a specific illness but rather a general health problem that takes many forms. Dementia comes from Latin words meaning "away" and "mind." It does not mean "crazy." Scientists have chosen this term as the least offensive and most accurate description.

It is a serious, even grim, subject. The leading cause of dementia is Alzheimer's disease, an illness for which there is no prevention, treatment or cure.

Today, more than 2.5 million men and women in the United States have Alzheimer's disease — including more than half the persons past age 65 who live in nursing homes. These numbers probably will increase as more people live into old age.

But we emphasize there is reason for hope. The vast majority of older people never develop a dementing illness. And all forms of dementia are not alike; some respond to therapy. Even when Alzheimer's disease is diagnosed, there is much that can be done — for the patient and the family — to make life more bearable.

Dementia: what it's not

If a loved one shows signs of mental deterioration, don't automatically assume dementia is the cause. Other medical conditions produce symptoms that resemble dementia:

■ *Drug intoxication* — This is a frequent source of confusion, forgetfulness and disorientation in the elderly.

Since many older people have chronic health conditions, they may take several types of medicine. Unfortunately, age makes the body more sensitive to drugs. Also, older people may take medicines incorrectly, confusing the proper amount and time of day.

Symptoms usually disappear when drugs are eliminated for a trial period, under a physician's direction. Many older people could manage quite well with fewer medications than they customarily take.

■ *Delirium* — This is a general term for symptoms that resemble dementia. Delirium often signals another problem related to acute illness or an adverse reaction to drugs. Medical treatment often can reverse the problem.

The symptoms of delirium — confusion, hallucinations, short attention span, reversed patterns of sleep and wakefulness — can fluctuate.

Delirium tends to begin suddenly, perhaps in a matter of hours; dementia begins with gradual, almost imperceptible signs. People with delirium frequently have a lower-than-normal state of consciousness. Those with dementia often are fully alert, despite their mental impairment.

Treatment options

Today, there is no cure for Alzheimer's.

Drugs, however, may help some aspects of behavior. A doctor must direct the therapy, since drugs for depression or hyperactivity can impair a patient's alertness and memory.

Publicity has surrounded a newly tested drug, tetrahydroaminoacridine (THA). Early studies suggested some improvement of symptoms, but it remains experimental. Toxic effects on the liver are a special concern.

Don't rely on drugs to control symptoms of Alzheimer's at home. If a loved one needs ongoing medication, you probably should consider long-term nursing care.

This does not mean an Alzheimer's patient must suffer. You can help a patient's overall health. Clean the dentures regularly. Exercise and nutrition are important. Doctors can remove cataracts and prescribe a hearing aid. Such measures won't reverse Alzheimer's, but they can lengthen the time your loved one retains dignity and independence.

■ *Depression* — Persons who are severely depressed may become withdrawn and silent. They may seem to lose intellectual functions (which doctors call "pseudodementia"). Proper treatment for the depression can restore their usual state of health.

Dementia has several forms

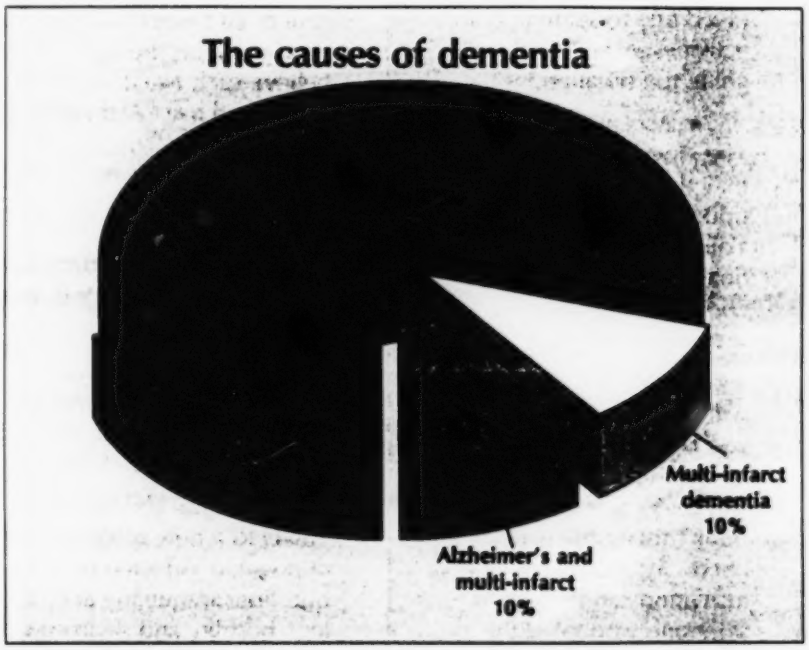
Even when dementia is diagnosed, you should not give up hope. There are several types of dementia, some of which can be treated:

■ *Multi-infarct dementia* — This occurs in 10 percent of cases. It refers to a series of strokes ("infarcts") within the brain. Over time, cumulative damage to the brain can result in dementia.

Multi-infarct dementia often progresses in a stepwise manner. You may be able to look back and determine that a loved one became clearly worse at a specific time. Also, the decline may halt for years and the person may even seem to recover somewhat.

In some cases, multi-infarct dementia can be stopped with treatment to prevent further strokes; at other times, the disease will continue unchecked.

Multi-infarct dementia generally appears between the ages of 40 and 60. Often, there is a cardiovascular connection. Many risk factors



All cases of dementia are not alike. Alzheimer's disease, which has no treatment or cure, accounts for many cases. When dementia has other causes, therapy may help.

To caregivers: here's how to cope

Caring for a dementia patient means readjusting your own daily activities. Some practical tips:

- *Keep life simple* — Don't overwhelm the patient with strange situations, background noise or several questions at once.
- *Don't argue* — Give choices, not orders: "Do you want to go to bed now or sit outside another half hour?" This helps deflect an emotional response.
- *Save face* — Talk to your loved one; never treat a patient as a "non-person." Encourage your loved one to share in daily activities, even if you must guide the situation.
- *Accept new roles* — The illness of a loved one may thrust unfamiliar duties upon spouse and children. You may have to take over finances or household chores. Don't be afraid to seek help.
- *Make plans* — What will happen to the patient if you become ill or die? Plan for backup care. Some families make a "cope notebook" listing the patient's needs and habits. This information can be vital to someone who takes the caregiver's place.

associated with heart attacks also are linked to multi-infarct dementia. Examples include obesity, cigarette smoking and high blood pressure. Note: you can prevent some of these risks; others can be controlled.

In 10 percent of cases, dementia results from a combination of multi-infarct disease and Alzheimer's.

- *Other* — Additional problems are responsible for about 20 percent of dementia cases. These ailments sometimes can be difficult to identify.

In the normal process of aging, mental function survives by a delicate balance of the body's coping mechanisms. Even a mild source of physical stress — such as influenza or a surgical operation — can upset the balance and lead to symptoms of dementia.

A partial list of causes includes: chronic alcoholism, structural problems of the brain (tumor, obstruction to the flow of spinal fluid); malfunction of the liver or kidneys; infections (tuberculosis and syphilis involving the brain); and other degenerative brain diseases (Huntington's disease, Parkinson's disease).

Some problems can be corrected. For example, lack of vitamin B_{12} and deficient thyroid hormone can be remedied easily. Other problems may not respond to therapy.

- *Alzheimer's disease* — This condition accounts for about 60 percent of all cases of dementia. Some doctors use different terms, depending upon the age when symptoms develop. Today, many experts believe such age distinctions are meaningless. We will follow this example and use "Alzheimer's disease" for the condition, whether it begins at age 40 or 80. The illness is named for a German doctor, Alois Alzheimer, who identified it in a middle-aged woman at the turn of the century.

Alzheimer's symptoms usually worsen

While Alzheimer's disease affects individual patients differently, it is possible to draw a general picture of what to expect.

During the earliest phase, a person may complain of lost memory, forgotten names and misplaced items. Many families dismiss these events as the result of temporary stress, especially since their loved one usually functions well at work and in a social setting.

As mental abilities decline, daily activities become impaired. Travel to a new place or management of personal finance becomes impossible. Affected persons may exhibit poor concentration, repeat questions frequently and show decreasing attention to daily tasks. Anxiety, hostility and depression will increase as individuals become aware of their impairment. At the same time, they may steadfastly deny there is a problem.

Later, patients are unable to cope without assistance. They may not recognize members of the immediate family or recall major aspects of current life. Personality changes are common at this point. Patients may accuse their spouse of being an impostor. They may talk to imaginary people or to a reflection in the mirror.

During the later stages of this steady decline, a patient is completely incapacitated and disoriented. Incontinence is common. Total care is required, often in a nursing home. All verbal skills are lost, and the affected person may be able to perform only basic movements such as walking down a corridor.

The course of Alzheimer's can run from less than three years to 15 years or more. Death usually results from a combination of malnutrition and infection.

Brain changes in Alzheimer's disease

Alzheimer's disease produces changes in the brain. In advanced cases, the brain's overall size may shrink markedly.

Alzheimer's disease causes changes in the outer layer (cortex) of the brain. This section of the brain has been impregnated with silver and is viewed under a microscope. *(Top circle)* Normal brain cells. *(Middle circle)* Abnormal fibers known as "tangles." *(Lower circle)* "Plaque" disrupts passage of electrochemical signals between brain nerve cells.

Microscopic examination of the brain shows two changes that are characteristic of Alzheimer's (see illustration):

- *"Tangles"* — Nerve cells in the outer layer (cortex) of the brain may become changed, leading to the appearance of abnormal fibers. Their technical name is neurofibrillary tangles. "Tangles" are associated with other brain disorders as well, including certain types of Parkinson's disease, Down's syndrome in adults and the "punch-drunk" syndrome that boxers develop after too many blows to the head.

- *"Plaque"* — This refers to another change at the outer layer of the brain. In this case, groups of nerve endings deteriorate, which disrupts the passage of electrochemical signals between the cells. Viewed under a microscope, this "plaque" resembles a scar.

What causes Alzheimer's?

Although there is no conclusive proof, experts are looking at several possible sources for the disease:

- *Heredity* — Abnormal genes have been implicated in most dementing illnesses. Their influence is especially clear in Huntington's disease, an inherited ailment marked by muscle spasms and dementia.

The genetic factor of Alzheimer's is more obscure. Risks are not large compared to other hereditary problems and to other diseases in general. Still, some families face greater danger.

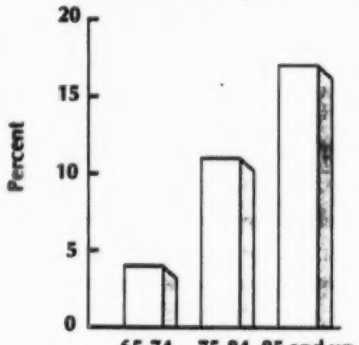
As a general rule, the more relatives you have with Alzheimer's and the earlier their age when symptoms began, the higher your own risk of developing the condition. Second-degree relatives (uncles and

Aluminum: a factor?

Some patients have small increases of aluminum in the brain. But there is yet no confirmed link between this metal and Alzheimer's.

Should you try to protect yourself from aluminum? Evidence says no. It appears in many cooking utensils, deodorants and antacids — and throughout the natural world. Everyone is exposed to it. Still, most people never develop Alzheimer's, and those who do were not excessively exposed.

Incidence of dementia by age groups



The risk of developing dementia increases with age. While some cases are reported in middle life, dementia is much more common in older people.

aunts, nephews and nieces) have considerably less risk than first-degree relatives such as brothers and sisters.

Regardless of family history, your risk increases with age. Alzheimer's affects up to 20 percent of the general population who survive into their 80s.

■ *Immune system* — Your immune system is the body's leading defense against many diseases. To combat foreign material, it produces custom-made proteins called antibodies. But for the system to work, it must distinguish between "friend and foe." Otherwise, the body will attack itself.

There are clues that Alzheimer's is associated with abnormal production of antibodies. A protein called amyloid (am'ah-loyd), which sometimes is related to abnormal immune function, is found in the brain "plaque" that is typical of Alzheimer's.

In addition to the immune defense system, outside agents that attack the body also may be linked to Alzheimer's.

Most viral infections — such as measles and the common cold — run their course quickly. Others are quite different. A virus may lie dormant within its host cell and attack the body years later. Some researchers believe a "slow virus" may be involved in Alzheimer's disease, but there is no solid evidence to support this theory.

■ *Toxic metals* — Doctors have found an excess of aluminum in the brains of some people with Alzheimer's. The amount is quite small and can be detected only with sophisticated technology.

Research in animals shows that aluminum can produce brain lesions that resemble the distinct "tangles" of Alzheimer's disease, but many questions surround the practical significance of this finding in humans.

■ *Neurotransmitters* — For your body to perform the activities of daily life, nerve cells within your brain must communicate. These cells do not directly touch each other, but they send messages via chemicals known as neurotransmitters. The process takes only fractions of a second but is very complex.

It appears that faulty communication between brain cells can lead to dementing illness. Parkinson's disease, which is marked by tremor and incoordination of the muscles, is linked to a lack of one neurotransmitter called dopamine (do'pah-men). Intriguing: another neurotransmitter, called acetylcholine (ah-see'til-koh'leen), is lacking in some portions of the brain in Alzheimer's patients.

These are promising clues, but no one can point to specific origins for the disease today. Such limits of medical knowledge may be disappointing if you see a loved one suffer from Alzheimer's. But there is

The diagnosis: how is it made?

Diagnosis of Alzheimer's requires a "team approach." Experts follow these steps:

- *History* — The doctor will interview people who know the patient and, when possible, the patient as well. What are the changes in behavior? When did they start? Have they progressed quickly?
- *Physical exam* — A thorough evaluation of the patient's body will spot other ailments that can be treated.
- *Testing by a clinical psychologist* — This helps distinguish normal age-related changes from dementia. Tests cover reasoning, learning, problem-solving, comprehension and communication.
- *Laboratory tests* — Tests help rule out other ailments. Examples: complete blood counts, blood levels of hormones and chemicals, and computerized tomogram of the head (CT scan).
- *Assessment* — Psychiatric and social factors will be considered in a specific program of care. This includes the family's financial and emotional resources and the patient's ability to share in decision-making.

hope for the future. Most of the information we now have was unknown just a decade ago, and many findings have come within the last few years. The boundaries of our knowledge are constantly and rapidly expanding.

Accurate diagnosis is essential

If a loved one begins to show symptoms of dementia, don't panic. And there is no need to feel helpless resignation, either. Instead, seek medical help for an accurate diagnosis.

Why is this necessary? It's the only way to distinguish other ailments that cause dementia, which sometimes can be treated. Even with Alzheimer's, much can be done to make life more pleasant, but a focused approach to managing this problem is possible only with a clear diagnosis. Finally, other ailments may be compounding the effects of Alzheimer's; treatment of these illnesses will not reverse Alzheimer's disease, but it can help overall conditions.

During the consultation, you should learn whether your loved one's condition is treatable; the remaining areas of mental competence; and what changes you can expect in the future.

Caring for a loved one — and yourself

Although there is no cure for Alzheimer's, you can enhance your loved one's quality of life:

- *Personal safety* — Disorientation leaves a person vulnerable to accidents. Remove clutter from the home (also remove valuable antiques and mementos, or furniture that is too delicate for an impaired person to grasp for support). Try *not* to alter basic, familiar arrangements of furniture or family routines.

Dementia causes a slowing of reaction time; it also impairs judgment. Carefully monitor your loved one's ability to drive. Watch for indications of undue confusion or hostility. If you must restrict the person from driving, ask an "authority figure" to make the announcement. Some patients will quarrel with a spouse, yet accept the advice of a doctor, lawyer or religious counselor. See if your state's Department of Motor Vehicles can issue a nondriver identification card.

- *Orientation* — In the early stages, especially, Alzheimer's can be terrifying to patients. They are alert enough to know something is amiss but powerless to change the situation.

You can help maintain a sense of normality by providing memory aids. Make lists and use a calendar. Emphasize the practical: some families post notes throughout the house ("Wash your hands" can be displayed above the bathroom sink). If your loved one wanders, get a metal bracelet that says "Memory Impaired," giving the patient's name and your telephone number.

For further information

National Organizations

Alzheimer's Disease and Related Disorders Association, Inc.
70 East Lake Street, Dept. X
Chicago, IL 60601-5997
Telephone: (800) 621-0379
(In Illinois, call [800] 572-6037)

Alzheimer Society of Canada
491 Lawrence Avenue West
Suite 501
Toronto, Ontario M5M 1C7
CANADA
Telephone: (416) 789-0503

Books

Alzheimer's Disease: A Guide for Families
by Lenore S. Powell, Ed.D., and Katie Courtice
Addison-Wesley Publishing Company, 1983

"Grandpa Doesn't Know It's Me" (children's book)
by Donna Guthrie
Human Sciences Press, 1986

The 36-Hour Day: A Family Guide for Caring for Persons with Alzheimer's Disease, Related Dementing Illness and Memory Loss in Later Life
by Nancy L. Mace and Peter V. Rabins, M.D.
The Johns Hopkins University Press, 1981

■ *Dignity* — It can be exhausting and frustrating to care for a loved one with Alzheimer's. But try to remember that objectionable behavior is the fault of the disease, not the person. Each patient is still a human; each deserves respect and love. Often you can show this in simple ways, such as help with bathing and grooming. When all verbal communication seems impossible, you still can touch and hug. Even Alzheimer's cannot destroy this basic sense of human contact.

■ *Build a network* — If your loved one has Alzheimer's, it's natural to feel defensive: many people try to handle the problem alone, refusing to admit their need for help. This does not benefit the patient or family. Learn to call on doctors, lawyers, clergy, therapists, social workers and support groups.

■ *Rally the family* — Many times, the responsibility of caring for an impaired person is not divided equally. Some relatives do less because of geographic distance, finances or health. Families may have long-held expectations about who should provide care. Unrelated disagreements may keep relatives from working together.

A family conference can help. If necessary, a counselor or "neutral party" can lead the discussion. Work together to identify your needs, resources and responsibilities in this challenging illness.

■ *Enjoy each day* — A diagnosis of Alzheimer's does not strip life of all meaning. It calls for readjustment, but with creativity and flexibility on your part, valuable moments can remain.

■ *Simplify the lifestyle* — Perhaps the person no longer can cook dinner or work in the yard, but you can request help with a simpler task. Establish a consistent routine of exercise, meals, bath and sleep. Limit distractions but look for ways to stimulate the person and provide meaningful occupation.

Accepting the unbearable

"Grow old along with me!" wrote poet Robert Browning. "The best is yet to be." If your loved one has Alzheimer's disease, that promise of golden old age may seem a cruel joke.

Expect to feel a range of conflicting emotions. Guilt, anger, frustration and fear may add to the stress of providing special care and meeting routine needs.

You may begin to mourn even before your loved one dies. This is natural, since you are watching a person slip away from daily life. Try to identify your feelings at various stages and share them with others.

Alzheimer's disease used to be called "the silent epidemic." Today, there is a growing awareness that this problem must be addressed. We can look for future developments to help bring this tragic condition under greater control.

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